ADDED REVENUE WITHOUT BURDEN

ARTHUR S. OTIS

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A NEW PLAN OF TAXATION

BY

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INTRODUCTION

Dr. Otis, a writer and lecturer on economics, is a member of the American Economics Association, The National Academy of Economics and Political Science, The Academy of Political Science, and The Academy of World Economics.

The author has many fields of interest beside economics. He is the author of books on mathematics, statistical methods, traffic regulation, aeronautics, airplane engines, celestial navigation, psychology and relativity.

Among psychologists and educators Dr. Otis is known internationally as the originator of the present widely used method of testing intelligence in schools, universities, clinics, and industry. His own intelligence tests have been used since 1918 to test over fifty million persons. Speaking of traffic regulation, he devised the present method of progressive traffic signals.

Dr. Otis' interest in economics dates from his youth when he read Henry George's *Progress and Poverty*. His magazine articles on economics concern taxation, inflation, depression, money, methods of voting, etc.

In this treatise Dr. Otis expounds a new method of taxation which is worthy of consideration by tax authorities and legislatures. It stems from Henry George's basic concept that the most equitable source of revenue is the community-created rental value of land. This basis of taxation is thoroughly explained in this treatise, with special reference to the advantage of the taxation of the rental value of land rather than its capital value. Many reasons are given for the adoption of this plan.

Although Henry George's proposals have not gained general acceptance among economists, Dr. Otis has modified these by certain limitations and qualifications which, in his judgment, render the plan of the taxation of the community-created rental value of land entirely feasible and satisfactory. He gives cogent reasons in support of his assertion that his so-called New Plan is most equitable and would be to the taxpayer the least burdensome form of taxation.

It would appear that in this day of overwhelming governmental expenditures, any workable system of taxation which can reduce the burden to the taxpayer should be welcome.

L. W. LAMBERT,
Tax Collector,
Pinellas County, Florida

PREFACE

We are all well aware of the fact that the need for revenue for purposes of government increases from year to year. At present we feel an urgent need for more and better schools, for more and better highways, and for many other things. We are aware also that present taxes are burdensome and in many instances inequitable, as will be shown in this essay.

The New Plan of taxation proposed in this essay is designed to accomplish two main purposes, namely (1) to provide additional revenue by tapping a source now inadequately drawn upon, and (2) gradually to supplant some of the present methods of taxation by substituting a method that is the least possible burden and the most equitable.

The New Plan is based upon the recognition of the fact that in any community in which land values are rising, the increase in the rental value of land accruing to landowners is a source of revenue that may be drawn upon further without burden to the landowner. A fundamental feature of the New Plan is the method by which the tax is based upon the assessed *rental value* of the land rather than upon its assessed capital value as at present.

The concept of the taxation of rental value rather than capital value has been presented by other economists, notably Henry George. But the New Plan introduces two new conditions not hitherto advocated. These are (1) that only *increases* in rental value shall be taxed, and (2) that the increases in rental value shall be taxed, not 100% as advocated by Henry George, but only 50%, thus dividing the benefit of increased

rental value equally between the community and the landowner.

The New Plan calls for the immediate freezing of all real estate taxes and the superposition of the tax on increases in rental value of land.

When the New Plan has been adopted, steps may be taken later to abolish various of the other forms of taxation, such as sales taxes, gasoline taxes, excise taxes, etc., as less suitable than the New Plan of taxation of the rental value of land. Presumably this would be done gradually as the need for this supplemental revenue diminished.

Points explained. In connection with the description of the New Plan of taxation, the monograph will explain:

1) the faults of the present method of taxation,
2) how the New Plan may be put into operation,
3) why it is more equitable than the present plan of taxation,
4) how it will increase revenue,
5) where the money would come from that increased the revenue,
6) why the New Plan would be a burden to no one,
7) how the New Plan would overcome the disadvantages of the Henry George plan, and
8) what the economic effect of the New Plan would be:
   (a) in discouraging speculation in land values,
   (b) in encouraging the best use of land,
   (c) in making the purchase of land for use easier,
   (d) in encouraging communities to spend public funds for improvements,
   (e) in affording greater relief to landowners in time of depression, and
   (f) in obtaining an increased revenue with the least strain upon the economy.

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Chapter I

LAND VALUE

What is meant by the value of land? We may think of land value in either of two ways. For example, let us say a nurseryman needs a plot of land on which to conduct an expansion of his nursery business. He asks the owner of the neighboring lot how much he will ask for it. The owner replies that the price is $1000. If the nurseryman buys the lot we may say that the *value* of the lot is expressed by the selling price of $1000.

Conceivably, however, the nurseryman may wish to make use of the land without buying it, so as to be able to use all his capital in the nursery business without investing any in the land. Let us say he asks the owner what he will take in the way of rent for the use of the land, and that the owner replies, "$80 a year." If the nurseryman agrees and rents the land, we may say that the *value* of the land is expressed by the $80 a year rent that it brings.

Capital value vs. rental value. In the above instance in which the value of the land was expressed in terms of the selling price of $1000, we would call the selling price the *capital value* of the land; and in the second instance, in which the value of the land was expressed by the $80 a year rent, we would say that the $80 a year was the *rental value* of the land.

If a plot of land is said to have a "rental value of $80," it means $80 a year.

Rent paid by a landowner. We think of a landowner as having the use of his land rent-free. But we must understand that in one sense the owner of a lot pays rent just as he would if he were a tenant. Here is why.

Let us consider further the nurseryman who wished to obtain the lot next to his nursery in order to expand his business. The owner will sell the lot for $1000 or will rent (lease) it for $80 a year. Let us say the tax on the lot is $20 a year.

If the nurseryman has to borrow the $1000 at 6% in order to pay for the lot, his total yearly cost of owning the lot will be the $60 interest plus the $20 tax, or $80 a year—the same as it would cost him to rent it.

On the other hand, if the nurseryman has $1000 at interest at 6% which therefore yields him an income of $60 a year, and uses this $1000 to buy the lot, he will lose the income of $60 a year. This is the equivalent of paying $60 a year interest. This $60 a year plus the $20 tax means that in this case also it costs him $80 a year to own the lot—again the same as it would cost him to rent it.

We see, therefore, that whether a buyer of land uses borrowed money or his own money to pay for it, it is quite possible that his total yearly cost of owning the land (interest plus tax) will equal the rent he would have to pay for it. In this sense we may say that in effect a landowner pays rent for the use of his land as truly as if he rented it from someone else.

Current value. We have just seen that even though the nurseryman bought the lot he needed, it would still cost him $80 a year to possess the land and use it, the same as if he rented it. We know that he would not buy the lot unless he had decided that it would be worth $80 a year to him. Or we

may say that even though he owns the lot it must have a value to him of $80 a year.

If we do not wish to call this "value of $80 a year" *rental value* because no renting is involved, we may call it the *current value* of the land, meaning the "value per year" of the possession of the land.

But in economics this *current value* is called *rental value,* and if we remember that the owner of the lot must pay what amounts to rent anyway, even though he owns it, we will not object to the current value being called the rental value.

So we may think of the *capital value* of a lot as its "lump-sum" value, and the *rental value* of the lot as its "per-year" value.

Leasing land. When a tenant pays a landowner monthly, or yearly, or otherwise periodically for the use of land, we often say that the land is "leased" by the owner to the tenant, especially if the renting is for a specified time and a contract called a lease, is entered into between the landowner and the tenant. However, in any case in which a tenant pays a landowner currently for the use of land, it is customary in economics to say that the owner *rents* the land to the tenant.

How land value is created. For the present we need not distinguish between capital value and rental value for the reason that, in general, the higher the price of land, the higher the rent will be, and vice versa. That is, in general, whatever it is that makes land high-priced also makes it cost more to rent. Let us consider what it is that gives land its value—what causes it to be high-priced or to cost high rent.

We might say briefly that it is *desirability* of land that causes a person to be willing to buy it or rent it, so let us consider what gives land desirability. The following then are the causes of desirability.

Ease of access. One of the most obvious and most impor-

tant reasons that one parcel of land will be more desirable and hence more valuable than another is greater ease of access. A plot of land in the center of an island that is covered with a dense growth of vegetation we may say has practically no ease of access, and hence no value, whereas a lot facing a smoothly paved street near the heart of a community we may say has ample ease of access. The difference in ease of access constitutes one important cause of difference in land value.

In general, ease of access is the result of the laying out of streets and the paving of those streets. We may say, therefore, that land value is "created" in part by the laying out and paving of highways and the building of bridges. (See Appendix A for details of an actual case.)

Public service. Another important source of land value is public service, as exemplified by police and fire protection. Thus, a lot will be more desirable and hence more valuable as a home site if it is situated in a town in which there is a police department and a fire department, than if it is situated where there is no police or fire protection. Other public services contributing to land values are: conduct of schools, libraries, parks, playgrounds, mosquito control, snow removal, garbage collection, sewer construction, street lighting and cleaning, municipal employment bureau, health inspection, zoo, etc.

Increase in population. The amount of profit to be made by a store, service station, theater, or other commercial establishment depends to a considerable extent upon the density of population of the community. That is, the more persons there are in the vicinity to patronize the store, service station, theatre, etc., the greater the profit with the same expenditure. This means that with any increase in population of the community a store can make more profit. And so can a service station, theater, hotel, laundry, garage, etc. A landowner always sees to it that he shares in any increase in the profit of

a store or other commercial establishment on his land by charging increased rent. Thus we see that an increase in the population of a community increases land values in the community.

Natural resources. In considering ease of access, public service, and increase in population as factors creating land value, we are not thinking of the land as "soil" but as *location*. Thus, a pier might be built out into a bay to house a dance hall. Space on the pier will have value for a restaurant or other concession, regardless of any consideration of the "land" under the pier.

However, the nature of land itself is a factor determining in part its value. Thus, an acre of fertile land suitable for a commercial crop is more valuable than an acre of land on the same farm that is too rocky or otherwise unsuitable for crops. Also a tract of land containing gold, oil or uranium is more valuable than a similar tract that contains no oil or ore.

We may say, therefore, that one of the important sources of the value of land is its fertility or the presence of some natural resource.

Utilities and transportation. Even though we have to pay for such utilities as gas, water, and electricity, and for transportation facilities, such as bus service, a community in which such utilities and facilities are furnished is more desirable than one in which cooking has to be done on a coal stove, water brought from a pump, and reading done by a kerosene lamp, etc. The bringing in of a railroad to a town that has none increases land values.

Of course we are now so used to all these conveniences that we take them for granted, but the fact remains that the desirability of a location may be enhanced by the introduction into the community of utilities and transportation facilities.

Owner-created desirability. Finally, we may mention as a

source of land value any improvement of land that the owner himself may cause to be made. For example, a pasture in which cattle are grazing but which is three-fourths covered with palmettos becomes more valuable after the owner has paid to have the palmettos cleared with a bulldozer and burned. Similarly, a low, damp section of a city becomes more valuable when the owner has paid to have it filled to a level that will remain dry. A developer may even pay for the building of streets, curbs, sidewalks, and sewers through his acreage preparatory to building houses for sale. To make the houses more saleable, the developer may put in lawns and shrubbery and otherwise beautify the property.

The desirability of land so created may be called owner-created desirability. In other words, owner-created desirability increases land value.

Summarizing, then, we see that among the sources of land value are the following:

1) Ease of access (building of streets, highways, bridges, etc.),
2) Public services (such as police and fire protection),
3) Increase in population,
4) Natural resources (such as oil and ore),
5) Utilities and transportation facilities (gas, electricity, bus service), and
6) Owner-created desirability (such as beautification).

These sources of land value will now be considered to determine whether any one of them deserves separate treatment in regard to taxation.

Tax as payment to community for benefit. When the expenditure of public funds, as for schools, streets, etc., has caused a plot of land to have an increased value, we may consider

that such increase in value was *community-created,* and that when the owner pays a tax on the land he is in effect paying the community in part for the benefit he derives by virtue of the increase in value that the community created in his land.

Division of benefit between owner and community. If the expenditure of public funds has increased the rental or current value of a plot of land by $100, and if the tax on that land has been raised $50 on that account, we may consider that the $50 tax increase was paid out of the $100 increase in rental value, and that in paying this increase in tax the landowner gives up to the community half the benefit received. In other words, we may consider that the benefit to the landowner residing in the increase in rental value of his land has been divided between him and the community—the landowner and community sharing the benefit equally in this case.

Most increases in rental value community-created. If we look over the sources of land value mentioned above—which are also sources of increase in value—we see that in five cases out of six an increase in value may be considered as arising independent of the landowner. That is, except in the payment of taxes, the landowner contributes nothing to an increase in the value of land that is caused by (1) the building of streets, etc., (2) the furnishing of public services, (3) an increase in population, (4) the finding of a natural resource in the land (except perhaps the cost of the prospecting and the like), or (5) utilities and transportation facilities.

The first three of these we may consider as community-created sources of increase in land value.

When gold or oil, for example, is found in a tract of land, it is generally considered that the land has an increased value on that account and that it is proper to increase the tax accordingly. This would indicate a tendency on our part to consider such an increase in land value as being in the same category

as an increase in land value resulting merely from an increase in population. Indeed, it seems proper to treat increases in land values resulting from the discovery of natural resources as if they were community-created.

Also, we may properly treat an increase in land values created by a newly inaugurated bus service or the like as in the same category with community-created increases because it is not created by the landowner and because there is no feasible way in which a bus company can be compensated for the benefit it brings to landowners in the way of increased land value.

We see, therefore, that we may properly treat any increase in land value as "community-created" except in a special case in which the landowner has spent money to develop land or beautify it or otherwise enhance its desirability. And we may therefore consider it proper that the community tax the landowner in part payment for the benefit of such "community-created" increase in land value.

Chapter II

FAULTS IN THE PRESENT METHOD OF TAXATION

Landowner's share of benefits too great. In this chapter it will be shown that under our present system of taxation the landowner receives about three-fourths of the benefit of the expenditure of public funds which result in increased land value. Reasons will be given why this is too large a share.

In order to understand what share of any increase in the rental value of land is retained by the landowner, it is necessary to clearly understand the relation between *rental value, tax, net return,* and *capital value.* This relation can be best understood if we understand what gives land its selling value.

What causes land to have selling value? The selling value of land is called its *capital value,* as distinguished from its *rental value* or *current value.* The capital value or selling price of a plot of land depends upon two primary factors: the rental value and the tax. This fact can be made clear best by means of two analogies.

First analogy. Let us say a YMCA rents rooms at $10 a a week. Let us say that with the growth of the community the demand for rooms in the YMCA is greater than the supply. Tom Smith would like to rent a room at the YMCA but has found that it is always full— no one ever relinquishes a room. He finds that Jim Brown has obtained permanent possession of two rooms and says to him, "I'll give you $12 a week if you will sublet one of your rooms to me." Jim says, "Fair enough," and sublets the room. Tom pays Jim the $12 a week; Jim pays the YMCA $10 a week for that room and pockets the remaining $2 a week.

Jim's friend, Bill, says to him, "How about releasing that extra room of yours and letting me rent it?" I'll give you a bonus of $100. I will let Tom Smith continue to occupy the room." (For the sake of the analogy we are assuming that Bill has the privilege of naming the tenant to whom the room will be rerented by the YMCA when he releases it.)

Jim says, "Look, Bill, I'm getting an income of $2 a week from that room. Where could I invest $100 to get an income of $2 a week?"

Bill says, "Well, how much bonus do you want for it?"

Jim thinks to himself, "$2 a week is about $100 a year. How much would I have to invest at say 10% to get $100 a year?" His answer is $1000. So Jim tells his friend, Bill, that the bonus or "selling price" of the room will have to be $1000. "Why should I take less?" he asks.

Bill is glad to invest some money where he can get a 10% yield so he agrees to pay Jim the bonus of $1000 to "buy" the room.

In this case the bonus or "sale price" or capital value of the room is the amount of money that would have to be invested to yield a return equal to the profit (net return) made on the room.

The case of no net return. Now let us consider a different situation. Let us assume that when rooms in the YMCA came to be worth $12 a week, the rent of the rooms was raised to $12 by the YMCA, and that then there was no demand for more rooms than were available and that anyone who wanted a room at the YMCA could obtain it. No one would then be able to sublet a room at a profit, and no one would be willing to pay a bonus for the possession of a room. We might say that the "selling value" of a room was zero. A room has a selling price or capital value only in case the possession of the room yields a net return.

Second analogy. Mr. Clark, the "owner" of a baseball team has contracts with all his players. He has a very valuable player, Jack, whom Mr. Jones, the "owner" of another baseball team would like to hire. Jones says to Clark, "If you will sell Jack to me I'll give you $10,000 for him." (He means he will pay Clark a bonus of $10,000 for Clark's contract with Jack.) Clark says, "I consider that Jack is worth $12,000 a year to me. My contract with him calls for a salary of only $7,000. So I consider that his contract nets me an income of $5,000 a year. Where could I invest your bonus of $10,000 and get an income of $5,000 a year?"

Jones says, "Well, how much will you sell Jack for?"

Clark thinks to himself: "How much would I have to invest at, say, 10% to get an income of $5,000 a year?" Answer: $50,000. So he says, "Make it $50,000 and you can have him." The player is "sold" for $50,000.

Fundamental principle. Any source of income that yields a net return (clear profit) will tend to have a selling price equal to the amount of money one would have to invest to obtain that same net return.

Consequently, when the rental value of a plot of land is greater than the tax and therefore yields a net return, that plot of land will have a capital value (selling price) equal to the amount of money necessary to invest to obtain interest equal to that net return.

Principle recognized by economists. The above principle of the relation between market value and net return is well understood and acknowledged by economists. Quotations from economists in evidence are given in Appendix B.

Rental value is independent of tax. When a man contemplates renting a house, he does not ask or care what tax the owner pays on it. His decision as to how much he is willing to pay in rent depends entirely upon matters of desirability—

such as the number of rooms, how modern it is, how pretty the yard is and how large, how well paved the street is, how good a view it has, how quiet the neighborhood will be, how convenient the transportation, etc. The amount of tax does not affect his decision in any way.

Similarly when a businessman computes the rent he can afford to pay for a plot of land to use, let us say, for a parking lot, he considers only the net income to be derived from the use of the lot. Thus, let us say he decides that by selling parking space he can take in $500 a month and that his expenses for wages, etc., will be $300 a month, leaving him an income of $200 a month. Let us say he considers his managerial time worth $160 a month. Subtracting this from the $200 he finds that he can afford to pay $40 a month rent for the lot—$480 a year. That is all he can afford to pay in rent whether the tax paid by the owner is $100 or $300 or $500.

Holding out for higher rent. To be sure, the owner may feel that a rent of $480 a year will yield him too small a net return on the money he has invested to buy the lot and he may therefore refuse to rent the lot for that amount. In that case another prospective tenant may contemplate leasing the lot for erecting an apartment house. He will consider the interest he will have to pay for money borrowed to build the house, the probable amount that the rent of the apartments will bring in, his managerial time, etc., and may decide he can afford to pay $600 a year rent. In no case has the prospective tenant considered the tax.

If no other prospective tenant can afford to pay more than $600 a year, we may consider that the rental value of the lot is $600 a year. The rental value of the land may be thought of as the highest rent that a prospective tenant can afford to pay.

Owner use of land. Instead of renting the lot to the prospective apartment-house builder in the above instance, the

owner might decide to build the apartment house himself. In that case he would have to consider exactly the same factors that the prospective tenant did—the interest paid (or lost) on money spent for building the house, the probable amount of rent the apartments would bring, his managerial time, etc. There is no reason to suppose that the income the lot would bring the owner in this way would be any greater than the $600 a year it would bring the prospective tenant. In such a case we may consider that the owner, in effect, becomes his own tenant, and we may still say that the rental value of land is the highest rent that any prospective tenant (including the owner himself) can afford to pay.

Insufficient net return. Let us say that in the above instance the rental value of the lot turned out to be $600 a year because the owner received no better offer than $600 a year from prospective tenants and because he saw no way to obtain more than $600 a year from the land by using it himself. Let us say the tax was $200 a year, leaving him a net return of $400 a year. Let us say he paid $10,000 for the lot; that would mean that the net return of $400 a year yielded him an interest of only 4% on his investment. He might well consider that this was too small a return. He may wish that he could get $800 a year rent so that, after paying the $200 tax, the net income would be $600 instead of $400, and so yield him 6% on his investment. But the wish will avail him nothing. The rental value is $600 and that's that. He can only decide that he paid too much for the lot and make the best of the $600 a year that he can get in rent—or in what amounts to rent if he uses the lot himself.

Thus we see that rental value is independent of the amount of the tax. The rental value, in its relation to tax or market value, may be considered as an *independent variable*—in contrast to the capital or market value which is a *dependent*

variable, depending upon the net return, which in turn depends upon rental value and tax.

Effect on capital value of increased tax. We have seen that the rental value of a plot of land is independent of the amount of tax. That is, if the rental value is $60 a year, it will be $60 a year whether the tax is $10 or $20 or $30. However, a change in the amount of tax has a definite effect upon the capital value (market value) of the land.

The first line of Table 1 shows, for example, that if the rental value of a plot of land is $60 and there is no tax, the net return from the land will be $60, and the capital value, being 100/6 of the net return, will be $1000.

TABLE 1

Effect upon capital value of land of taking in tax increasing amounts of rental value.

Rental value	Tax	Net return	Capital value
$60	$00	$60	$1000
60	10	50	833
60	20	40	667
60	30	30	500
60	40	20	333
60	50	10	167
60	60	00	000

The second line shows that if the tax is $10, the net return will be $50 ($60 minus $10), and the capital value will be only $833 (100/6 of $50). The third line shows that if the tax is $20, the net return will be only $40, and the capital value (100/6 of $40) will be only $667, etc.

We see, therefore, that in the case of a plot of land having a fixed rental value, *the effect of increasing the tax is to lower the capital value* (market value).

Effect of taxing 100% of rental value. It should be noted particularly that if a tax is imposed upon land value equal to

100% of the rental value of the land, the capital value (market value) of the land becomes zero.

We saw by the last line of Table 1, for example, that if the rental value of a plot of land is $60 a year and a tax of $60 is imposed upon the land, the net return, being the amount of rental value left after the tax is paid, will be $60 minus $60, or zero. Hence the capital value, which is the amount of money necessary to invest to yield an income equal to the net return, is therefore also zero, because it takes no money invested to yield an income of $0 a year.* (No one would pay anything for a plot of land if there were no income to be derived from it because the taxes ate up all the rent.)

Division of rental value between landowner and community. It has been stated that under our present system of taxation, when the rental value of a plot of land has been increased by the expenditure of public funds, only about one-fourth of that monetary benefit goes to the community in increased tax, leaving about three-fourths to the landowner. Indeed, we may say that under our present system about three-fourths of *all* rental value goes to the landowner. Let us see why this is so.

Table 2 shows the portion of rental value going to the landowner in the case of each of various tax rates from 4% to 0% of capital value. In each case the figures relate to a plot of land having a capital value of $1000. In each case 6% has

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* We may express the relations between capital value, rental value, and tax in a mathematical formula, as follows (assuming an interest rate of 6%).

Let C represent Capital value;
Let R represent Rental value; and
Let T represent Tax. Then

$$C = \frac{R - T}{.06}$$

We see, therefore, that if the tax, T, is as great as the rental value, R, then the value $R - T = 0$; hence $C = 0$.

been taken as the capitalization rate—the rate of interest used in computing the capital value of land from its net return. This rate is taken because it is a common rate of interest and because it is the rate that is often used for purposes of appraising the capital value of property by the appraisers of the Equitable Life Insurance Company. This means that in each case the net return was $60.

TABLE 2

Portion of rental value, at various tax rates, going to landowner on plot of land yielding net return of $60 and having capital value of $1000.

Tax rate	Tax	Net return	Rental value must have been	Portion of rental value going to landowner
4%	$40	$60	$100	60/100 or 3/5
3%	30	60	90	60/ 90 or 2/3
2%	20	60	80	60/ 80 or 3/4
1½%	15	60	75	60/ 75 or 4/5
1%	10	60	70	60/ 70 or 6/7
0%	00	60	60	60/ 60 or all

The first line of the table shows that if the tax rate is 4%, the tax is $40, hence the rental value must have been $100 to allow a net return of $60 after the payment of the $40 tax. The portion of the $100 rental value going to the landowner is therefore 60/100, or 3/5. The second line shows that if the tax rate is 3%, the tax is $30; hence the rental value must have been $90 to allow a net return of $60, and the portion of the rental value going to the landowner in this case was 60/90, or 2/3, etc.

We see from this table that as the tax rate is decreased a larger and larger share of rental value goes to the landowner.

Now a common rate of tax is one amounting to 2% of the capital value of land, and we see from the third line of the table that in that case the portion of rental value going to the landowner is three-fourths.

Now, what is true of rental value is true also of increases in rental value. For example, if the rental value of a plot of land increased in an amount causing an increase of $60 in the net return, there would be a corresponding increase of $1000 in the capital value. The third line of the table could then be interpreted to mean that with a 2% tax rate there would be a corresponding increase of $20 in the tax. This would show that there must have been an increase of $80 in the rental value to allow an increase of $60 in net return after the payment of the additional tax. Hence, the portion of the increase in rental value going to the landowner would be 60/80, or 3/4, as before.

Free gift from the community. Let us say that the rental value of a plot of land has been increased $100 (as from $400 to $500 a year) as the result of the expenditure of public funds (as for paving a street or building a new school), or as the result of the growth of the community, or both, without the landowner having contributed otherwise in money or labor to the increase in rental value. Let us say that because of an increase in capital value the tax has been increased $25. This means that the landowner is receiving an additional net return of $75 a year, as the result of the expenditure of the public funds and/or the increase in population. In that case it would seem proper to consider that the additional income of $75 a year to the landowner is in the nature of a free gift from the community.

This is so because it is proper to consider that in such a case the increase in rental value was created by the community, and that it could have been obtained by the community merely by levying an annual assessment on the land equal to the amount of the additional rental value, in lieu of the additional tax. If the community chooses to relinquish any portion of the additional rental value so created and allow the landowner

to retain this portion of the additional rental value, the increase in income to the landowner is in the nature of a free gift from the community.

A second fault in the system. We have seen that one fault of the present general property tax as applied to land is that out of any additional income that comes to the landowner in increased rental value as the result of the expenditure of public funds, the landowner customarily pays a tax of only about one-fourth of that income, thus retaining about three-fourths for himself as a free gift from the community; whereas it would seem more equitable for the community to obtain a larger share of such community-created value.

A second fault of the present system is that it is sometimes unjust in the opposite way, that is, by causing a landowner to pay for a benefit that he does not receive. Here is how:

Paying for a benefit not received. Let us say that an island adjacent to a city on the water front is opened up for development by the building of a bridge to the island at the city's expense. It might be that, as a result of the island's thus being made more accessible, the rental value of the land of the island as a whole increased by $10,000. This might cause the taxes on the land of the island as a whole to become $2500 higher. This would leave an increase of $7500 a year net income (three-fourths of the $10,000 increase in rental value) to be retained by the owners of the island property.

Now let us suppose that it costs the city $5000 a year interest on the money borrowed to build the bridge, and that this cost is distributed among all the taxpayers of the city in increased taxes.* A large portion of the taxpayers of the city may there-

* The case in which a public improvement of this sort is paid for by special assessment to landowners presumed to be benefited is discussed in Chapter V.

fore be paying additional tax while receiving no benefit from the bridge in the way of increased rental value. Therein lies injustice and a fault of the present system.

An alternative procedure. One way to prevent the injustice mentioned above would have been to increase the tax on the land of the island to equal one-half of the increase in rental value. The city would then have received in taxes one-half of the $10,000 increase in rental value. This $5000 a year would have been sufficient to pay the interest on the borrowed money—still leaving the island landowners a free gift of $5000 a year—and there would have been no need to raise the tax on the property of the city as a whole. It is unjust to impose any additional tax upon landowners who receive no benefit in increased rental value from a given expenditure of public funds while making a free gift to those fortunate individuals who happen to own the land that has increased in rental value.

Possible confiscation of capital value. We have seen that in certain instances a landowner may be contributing in taxes to the cost of a public improvement and yet not receive any benefit from it in the way of increased rental value of his land. If the cost of a public improvement necessitates an increase in the tax rate, the owner of a plot of land not so benefited may even find that a portion of the capital value of his land has been, in effect, confiscated. Let us see why.

A concrete case. We have already seen by Table 1 that if the tax is raised on a plot of land when there is no increase in the rental value, the capital value of the land is reduced. But let us consider a concrete case. Suppose the rental value of a plot of land is $800 and the tax is $200 (being a 2% tax on the $10,000 capital value of the land). Let us say the tax is raised to $260 because of the expenditure of public funds, although this expenditure of public funds did not increase the rental value of this plot of land. The net return would then be $800

minus $260, or $540. This net return, capitalized at 6%, would indicate a capital value of only $9000. (A prospective buyer, knowing that the net return of $540 would equal the interest on only $9000 would not pay more than that for the land.)

A form of confiscation. We see, therefore, that any increase in the tax on a plot of land, when there is no increase in the rental value, reduces the net return, and that the capital or market value of the land is consequently reduced in proportion. In the case mentioned above, in which there was a drop in the capital value of a plot of land from $10,000 to $9,000, the effect upon the landowner, financially, would be the same as if a bank deposit of $10,000, paying him 6% interest, had suddenly been reduced to $9000. In a sense, therefore, it is a form of confiscation of the capital value of the land.

Faults to be overcome. We have seen that the present plan of taxation has two important faults, in that (1) of the benefit to a landowner occurring in the way of an increase in the rental value of his land, about three-fourths goes to the landowner, and (2) in certain instances a landowner may be required to pay a higher tax to help pay the cost of public improvement from which he receives no benefit in the way of increased rental value, and this may cause an actual loss to him of a portion of the capital value of his land.

A more equitable plan. In view of these faults it would seem that a more equitable plan of taxation would be one in which no landowner would be taxed to pay for improvements that did not benefit him by increasing the rental value of his land, and in which any landowner who did benefit from the expenditure of public funds would contribute to the community in taxes a greater portion of that benefit.

The New Plan of taxation proposed in this book provides, therefore, that in the case of any increase in the rental value of land, created by the expenditure of public funds for im-

provements or public service, or by an increase in population, or by any cause other than *owner-created desirability,* as discussed in Chapter I, there shall be imposed upon that land a tax equal to half (50%) of that increase in rental value, so that the landowner will retain not three-fourths but only one-half of the increase in rental value so produced.

The New Plan provides that in the case of *owner-created desirability* the tax on the increase in rental value will be reduced by the amount necessary to make due allowance for the expenditure of money and effort by the landowner in increasing the rental value of his land. The method of making such allowance for owner-created increases in rental value is given in Chapter IV.

No hardship. At this point it should be understood that if the New Plan just outlined is put into effect, whereby a landowner who benefits by an increase in the rental value of his land shares that benefit equally with the community, there will be no hardship on anyone. A 50% tax on increases in rental value will have the effect merely of preventing fortunate landowners from getting as large a free gift from the community as otherwise. For example, in the case of the owners of the island property postulated above, whose rental value was increased by the construction of the bridge, it would be no hardship for them to receive a free gift from the community of $5000 a year—even if it might otherwise have been $7500.

The equal division of benefits. If it is decided that it would be entirely fair to landowners, who are fortunate enough to find their land increased in rental value without cost to them, to share that benefit equally with the community by paying in taxes one-half of the increase in rental value (and so receiving, themselves, a free gift from the community of one-half of that increase, the next question is how best to put the plan into effect. This is discussed in the next chapter.

Chapter III

THE NEW PLAN

Purpose of the chapter. We saw in Chapter I that in most instances of increased rental value of land the increase comes about without any expense for such purpose on the part of the landowner. This chapter is devoted to the discussion of the New Plan as it relates to such non-owner-created increases in rental value. We have seen that in the case of any increase in the rental value of land that is not owner-created, it has seemed proper that the benefit of such increase be shared equally between the landowner and the community. Owner-created increases in rental value are treated in Chapter IV.

Base tax. Whenever the New Plan is put into effect, each parcel of land presumably will already have a tax upon it. We have seen that any change in the amount of tax on a parcel of land which takes place without any change in the rental value of the land will affect its capital value. That is, we have seen that if the tax is raised when there is no rise in rental value, the capital value will be decreased; whereas, if the tax is reduced in such a case, the capital value will be increased.

It is intended that the putting into effect of the New Plan will not alter the capital value of any land. Consequently, the putting into effect of the New Plan will not cause any change to be made in the tax on any parcel of land. The tax that it already bears will remain unchanged until such time as the rental value changes. The tax existing on any parcel of land at the time of the adoption of the New Plan will be referred to as the *base tax*. If and when the rental value of any parcel

of land increases, the tax on the land will consist of the *base tax* plus the *new tax,* the *new tax* being 50% of the increase in rental value.

New tax. There may be, of course, two or more increases in the rental value of a plot of land, after the adoption of the New Plan. Regardless of the number of such increases, however, the total tax on any plot of land after the adoption of the New Plan will be the *base tax* (which remains unchanged) plus the *new tax,* which now becomes 50% of the amount by which the rental value at that time exceeds the rental value the plot of land had when the New Plan went into effect.

For example, if the New Plan went into operation when the rental value of a piece of land was $800 a year and the tax $200, the $200 tax became the *base tax* which will remain the same and be imposed each year.* Then in any later year in which the rental value has increased to, say, $1400 a year—which will be an increase of $600 a year over the rental value at the time the New Plan was adopted—the *new tax* will be 50% of the $600 increase in rental value, or $300. This added to the base tax of $200 will make a total tax of $500.

In the above instance the landowner would be sharing the $600 a year increase in income equally with the community—paying $300 a year in additional tax to the community, and retaining the other $300 a year income as a free gift from the community.

Essence of the New Plan. The New Plan of taxation recommended in this book is basically as follows.

(1) Whatever tax is being imposed upon any plot of land at the time of the adoption of the New Plan will be continued as a *base tax.*

(2) Thereafter, assessments of land values will be made of

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* unless the rental value later falls more than 50% as explained below.

the rental value instead of the market value, and reassessments will be made at frequent intervals, preferably each year.

(3) After each assessment of rental value has been made, the excess in rental value—that is, the amount by which the rental value that year exceeds the rental value the land had when the New Plan went into effect—will be ascertained, if there be such an excess.

(4) Then, in lieu of any later increase in the tax that would normally arise because of an increase in the market value of the land, there will be imposed an additional tax of 50% of such excess rental value. This may be referred to as the *new tax*.

(5) If at any time there is no excess in rental value over that at the time of the adoption of the New Plan, there will be no *new tax* at that time—no tax above that which was being paid at the time of the adoption of the New Plan.

(6) In comparison with the present 'capital gains tax' the *new tax* may be said to be a 'rental gains tax'.

(7) In essence, the New Plan does not call for the abolition of any other existing taxes, such as the income tax, gasoline tax, etc.

Additional features. In addition to the essential features of the New Plan mentioned above, provision is made (as explained below) for a reduction even of the base tax in the case of a drop in rental value below that at the time of the adoption of the New Plan. Also, provision is made for allowance for owner-created increase in rental value.

Reduction of the free gift. We have seen that under the present plan when the rental value of a plot of land increases, only about one-fourth of that increase is absorbed by the community in increased tax; and hence the landowner retains as an increase in his net return about three-fourths of that increase in rental value.

We have seen that in most instances this increase in net return to the landowner comes about without any cost or effort on the part of the landowner, and that in such a case the increase in net return is in the nature of a free gift from the community to the landowner.

We have seen also that under the New Plan the increases in net return to the landowner resulting from an increase in rental value would be less than under the present plan because under the New Plan the increase in rental value would be reduced from about three-fourths to one-half.

We may say, therefore, that the effect of the adoption of the New Plan in the case of any increase in rental value is to reduce the amount of the free gift from the community to the landowner.

The least possible hardship. The New Plan will cause the least possible hardship to those who pay the tax. This is so because

(1) even after the adoption of the Plan, the landowner may keep all of the increase in rental value of the land that has occurred since he bought it up to the time of the adoption of the Plan, and because

(2) there will be no increase in the tax on land if the rental value has not increased after the adoption of the Plan, and hence

(3) if any landowner does pay any additional tax it will be because his land has increased in rental value after the adoption of the Plan, and because

(4) the landowner will be able to pay the additional tax out of the excess in rental value of the land which he receives,* and still retain for himself half of that increase, or because

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* The case in which the increase in rental value is not represented by an increase in cash income is treated later.

(5) he can sell the land at a profit.

For example, let us say that a man has bought some land for $1000 when the tax was $20 and the rental value $80. Let us say that the rental value has since gone up to $100 and that a 50% tax on the $20 increase in rental value has caused the tax to go up $10, that is, from $20 to $30. Now let us say that the man does not wish to pay the tax of $30. In that case he can sell the land at a profit. We know that this is so because when the rental value has become $100 and the tax $30, the net return (rental value minus tax) is $70, and this return, capitalized at 6%, shows the land to be worth $1167. By selling the land for $1167, the man can buy other land for $1000 that is just as good as his was at first, and on which the tax is only $20, and he can still retain the $167 profit.

Reduction in rental value under the New Plan. There are many causes that may reduce the rental value of land. For example, the rental value of land in a residential section might be reduced because the city made a dump near it, or because the city had built an airport near it and the low-flying planes were annoying, or because a beach near the section had washed away, or because a factory or mine, or other source of employment to the inhabitants had closed, or because the city had closed a school in the neighborhood, or because a river had taken to overflowing its banks too often, or because the community was subject to increasing smog, or merely because the community was decreasing in population.

It has been recommended in this book that a landowner be taxed 50% of any community-created increase in rental value of his land. The question arises, therefore, as to what should be done about community-created *decrease* in rental value, or indeed any decrease in rental value caused in any manner such as those mentioned above. If the tax on a plot of land is raised $50 on account of an increase of $100 in rental value,

it would seem logical to lower the tax $50 in the case of a decrease of $100 in rental value.

The recommendation. It is recommended, therefore, as a part of the New Plan, that in the case of a decrease in rental value the tax on the land so affected be lowered by an amount equal to 50% of the decrease in rental value.

Automatic operation. Indeed, this provision for decreases in rental value would be carried out automatically in most instances by virtue of the stipulation that the *new tax* in any case is 50% of the excess in rental value over that at the time of the adoption of the Plan. For example, let us say that at the time of the adoption of the Plan, the rental value of a plot of land is $80 and the tax $20. Let us say the rental value first goes up to $140. The *new tax* would then be 50% of the $60 increase in rental value, or $30. The total tax would then be the *base tax* of $20 plus the *new tax* of $30, or $50. Now let us say that the rental value sank from $140 to $100. The excess of $100 over the original $80 rental value would be $20. The total tax would then be the $20 *base tax* plus 50% of the $20 excess, or $30. This is a reduction in tax of $20 ($50 to $30). Thus we see that because of a drop of $40 in rental value (from $140 to $100) the tax was automatically lowered 50% of $40.

Marked decrease in rental value. It is possible that after the adoption of the New Plan the rental value of a plot of land might fall below what it was when the New Plan went into effect. If this happened and the decrease was considerable the case might call for special consideration. That type of case is discussed in Appendix C.

Advantages of the New Plan. The New Plan of taxing increases in rental value of land has the following distinct advantages.

No increase in tax without benefits. An important advantage of the New Plan is that it imposes no additional tax upon

any landowner who has not benefited by having his land increase in value. Under the present plan tax rates are sometimes raised, thus increasing the tax on a plot of land even though its rental value has not increased. Under the New Plan if the rental value of a plot of land does not rise the tax will never be raised.

Additional tax in proportion to benefit. A second advantage of the New Plan is that when the rental value of land increases, an increase in tax is imposed directly and exactly in proportion to the benefit received by the landowner in increased rental value; whereas it has been shown that under the present plan taxes are sometimes not in proportion to benefits received.

No confiscation of investment. A third advantage of the New Plan is that under no circumstances is any of a landowner's investment in land confiscated as the result of an increase in tax. It should be understood that the market value of land will not increase as rapidly as otherwise when subject to a 50% tax on increase in rental value. But a tax of 50%, or any percent, upon an increase in rental value can never depreciate the market value of land.

Appendix D explains why the market value of land will not increase as rapidly under the New Plan as under the present plan.

An incentive to the landowner. A fourth advantage of the New Plan, residing in the taxing of only a portion (50%)of the increase in rental value, in comparison with the Henry George proposal to tax 100% of the rental value, is that it leaves the landowner a share of the benefits to be derived from the expenditure of public funds for better streets, highways, and other public improvements, and thereby provides him with a definite incentive to vote for the expenditure of public funds for public improvements.

Less hardship because of decreased rental value. We have seen that in the case of a decrease in the rental value of land occasioned through no fault of the landowner, the hardship to the owner is less under the New Plan than under the present plan. This is so both because his tax is reduced by a greater amount under the New Plan and because his loss in capital value is less under the New Plan.

No penalty on owner-created increase in rental value. It was shown in Chapter I that an increase in rental value may be owner-created, as, for example, when acreage is converted into a residential area by the owner who subdivides the area, and in it has the streets paved and the curbs, sidewalks, sewers, etc., installed at his own expense. In this way the rental value of the land in the new residential area is increased in the same way as if the city had made the improvements. It is clear, however, that in such a case the increase in rental value cannot be considered as community-created in the same degree that would be true if the city bore the expense of the improvements.

In the levying of taxes on land the present plan makes no distinction as a rule between owner-created and community-created increases in rental value. However, the New Plan does, and provides a method for use when feasible, whereby owner-created increase in rental value is not taxed. This provision is fully explained in Chapter IV.

The new tax as a percent of the capital value. Since we are so accustomed to think of a tax on real estate as a percent of the capital value (or assessed value) it may be well to understand that the New Plan could be put into effect by levying a tax on the increase in capital value of land instead of the rental value.

For example, let us consider the familiar example of the plot of land having a rental value of $800 and which is being

taxed $200 a year (this being a 2% tax on the $10,000 capital value). We have seen that if the New Plan were put into operation and the land then doubled in rental value (an increase of $800 a year in rental value) the *new tax* would be 50% of the $800 increase in rental value, or $400 a year.

At first it might seem that if the rental value doubled the capital value would double, the increase being $10,000, and we would then have merely to levy a 4% tax on the increase in capital value to obtain the *new tax* of $400. However, as explained in Appendix D, under the New Plan, the capital value of land will not increase in the same proportion as the rental value. In this case the capital value would tend to increase only two-thirds (on account of the anticipated increase in tax) and would therefore be only $16,666, an increase of $6,666. Consequently it would take a 6% tax on the increase in capital value to yield the *new tax* of $400. (6% of $6,666 is $400.)

It can be shown that if the New Plan is in effect and the rental value of a parcel of land has increased and a *new tax* of 50% of the increase in rental value has been levied upon the land, the capital value of the land will increase by an amount such that the *new tax* equals just p% of the increase in capital value—p% being the interest rate, whatever it is, that is used in capitalizing the net return to find the capital value.

This means, for example, that if the interest rate used in capitalizing the net return is 5%, the *new tax* under the New Plan will be 5% of the increase in capital value of the land.

Taxing increase in capital value. The reader may wonder, if this is so, why not levy the *new tax* as a percent of the increase in capital value?

Not a feasible procedure. The reason for not following such a procedure is that it is not feasible because the capital value

of a parcel of land adjusts itself to the net return from the land *after* the *new tax* has been levied, and because there is consequently no way to determine what the increase in capital value will be until the *new tax* has been levied.

This means that in order to adopt the suggested procedure we would have to begin by finding the *new tax* by finding 50% of the increase in rental value so that the new net return could be found and from that the new capital value. And since the *new tax* would have to be found in the first place from the increase in rental value, there would be no need to find it in any other way.

The New Plan not drastic. The mention of a 50% tax on increase in rental value may sound drastic; but it is not as drastic as it sounds. We have seen, for example, that if the rental value of a plot of land is $80, and the market value $1000, the tax rate being 2% of the market value and the tax consequently $20, the 2% is already 25% of the rental value. And if, under the present plan, the rental value increased $40, and the market value consequently increased to $1500, the tax, at the same 2% rate, would be $30, an increase of $10. And we see that this increase of $10 in tax is 25% of the $40 increase in rental value.

Since a 25% tax on an increase in rental value corresponds to a 2% tax on market value, we may think of a 50% tax on increase in rental value as corresponding to only a 4% tax on market value. Then it does not seem so drastic.

Natural resources. We have mentioned natural resources, such as gold, oil, and uranium, as a source of rental value of land. When a plot of land is being used as farm land it will have a comparatively low rental value; whereas, if oil is discovered under that plot of land the rental value becomes very high. This is true because, even after allowing for the cost of the prospecting by which the presence of oil was discovered,

the profit to be derived from the production of oil on the property will be far greater than the profit from farming the land.

There is no need to consider this increase in rental value as "community-created"; but neither is it owner-created. We may call it nature-created. At any rate, since such an increase in rental value is neither community-created nor owner-created, it should seem proper to let the benefit of the discovery of the oil or other natural resource be shared equally between the owner and the community. In other words, the increase in rental value occurring because of the discovery of oil or any other natural resource may properly be treated in the same way as an increase in rental value occurring as a result of an increase in population—by being taxed 50% according to the New Plan.

Henry George's proposal. The taxation of rental value rather than market or capital value was first proposed by Henry George in his *Progress and Poverty* (1891). Henry George's proposal was that a tax be imposed on land equal to the whole of the rental value.

Henry George understood the fundamental fact that when rental value is community-created, the net return of land (rental value left after taxes) is originally in the nature of a gift to the landowner from the community, and it was his purpose to abolish this gift and let the community receive the whole of the benefit of the rental value of land. Thus, Henry George says, *Progress and Poverty,* p. 403, "We already take some rent in taxation. We have only to make some changes in our mode of taxation to *take all of it.*" (Ital. ours.)

We might grant that if a man obtained a tract of land free and it later came to be worth $10,000, and then Henry George's plan was adopted and the market value of the land became zero, the man has not really lost anything because the land did not cost him anything in the first place. But it is

highly unlikely that this could be the case with any present landowner because in practically all cases the landowner has paid money for the land and if he is a recent buyer he may have paid as much or nearly as much as the present market value of the land.

Confiscation. It is important to realize, therefore, that if a man has just bought a tract of land for say $2000, and the tax is then raised to equal the rental value of the land, and the market value consequently drops to zero, the man who just bought the land loses the whole $2000 he paid for it, and yet the former owners continue forever to reap the full benefit of the rise in rental value of the land. Let us see why this is so.

Let us say that Mr. A obtained a tract of land without cost, that he sold the land to Mr. B. for $1000 and that Mr. B sold the land to Mr. C for $2000. Then if the market value of the land became zero because the tax was raised to equal the rental value of the land, Mr. A has made a profit of $1000, Mr. B has also made a profit of $1000, but Mr. C has suffered a loss of $2000.

Let us say that Mr. C. gave up an income of $120 a year (the interest at 6% on the $2000 he paid for the land). He has lost that income altogether, but Mr. A now has an income of $60 a year (the interest on the $1000 profit that he made) and so has Mr. B. Together Mr. A and Mr. B are drawing the $120 a year income that Mr. C lost. This is manifestly unfair.

We see, therefore, that any time that the tax on land is increased to equal the full rental value of the land, as advocated by Henry George, the capital of market value of the land vanishes and is, in effect, confiscated, yet the former owners continue to reap the full benefit of the rental value that the land acquired before the raising of the tax took place.

Comparison with the Henry George Plan. As has been stated, there is a similarity between the present New Plan of taxation and the so-called "single tax" proposed by Henry George, in that both plans call for the taxation of rental value rather than capital value. But Henry George's plan has certain disadvantages, which are given in Appendix E, for the benefit of the reader who may not be familiar with the Henry George plan.

CHAPTER IV

OWNER CONTRIBUTION TO RENTAL VALUE

Community-created rental value. We have seen that an increase in rental value of land may result from the expenditure of public funds for streets, highways, bridges, schools, libraries, hospitals, parks, playgrounds, sewers, police and fire protection, etc., or as a result of an increase in population of the community. It is taken for granted that any such increase in rental value of land may properly be considered as having been created by the community.

Owner-created rental value. However, it must not be overlooked that in certain instances a part, at least, of the increase in rental value of land may be properly considered as having been created by the landowner. This is true especially in cases in which the owner has spent his own money to beautify land or otherwise make it more desirable or useful. This means that in all such cases a problem arises as to how to equitably levy the tax on the increase in rental value. This problem may be more acute in cases of large-scale development in which large funds are spent by landowners. Let us consider such a case and give thought to an equitable solution of the problem.

A large-scale development project. Again let us say an uninhabited island lies fairly close to a city. It is covered with a dense growth of trees—too thick to permit entry upon the island. Before the inhabited area of the city grew out to the neighborhood of the island, the island was considered of no value.

But finally, let us say, a time comes when the island is found to be closer to the heart of the city than any other available acreage, and let us say, that, whereas the city might build a bridge to the island as in the case previously considered, in this case a syndicate has decided to build the bridge itself and to open up the island and develop it as a residential section of the city.

This will entail the investment of a considerable sum—to build a concrete bridge to the island; to dredge sand around the island to make a channel so that it will be accessible by boat; to build the island up to a suitable elevation to prevent its being washed over in case of heavy storm; for bulldozing the island to remove the vegetation and to burn it; to lay out streets, curbs, and sidewalks and pave them; to install sewers; and to drill wells for water and lay the distribution pipes; etc.

What about the taxation of the increase in rental value that comes about after this development?

The increase in rental value. We might say that from the point of view of use, the land of the island had no value before the development was begun. We might consider, of course, that as the residential section of the city grew toward the island, the island gradually acquired a *potential* rental value. This would be evidenced by the fact that the syndicate would be willing, in the light of the possible profits to be made by developing the island, to pay the owner something for the island in order to be able to make those profits. In advance of a definite offer to the owner by the syndicate, it would be difficult, of course, for an assessor to estimate the potential rental value of the island; this would depend to a large extent upon the rate of growth of the city and the probable rate of future growth. It would depend also upon the feasibility of the project in the light of its probable cost and the probable demand for lots on the island.

For simplicity and convenience of illustration, let us assume in this case that the sum paid the owner of the island by the syndicate is negligible and may be disregarded. This means that we may consider that the island has no rental value before the development is begun and hence no capital value, and that hence no tax has been levied upon it.

But let us say that when the syndicate has built the bridge, cleared the land, etc., the lots have a rental value of $80 each, which amounts, say, to $400 an acre.

Who created the increase in rental value? Now the important question is: To what extent was the new rental value created by the community and to what extent by the syndicate? From one point of view we might feel that it was largely created by the presence of the community, on the ground that if the island had been far from any habitation it is possible that no amount of money spent upon it would give it any rental value. From the practical point of view, however, we may consider that so long as the island is uninhabitable it has no rental value, and hence, the syndicate, in spending the money to make it habitable gave it the rental value.

The justice of the proposed New Plan of taxation of increase in rental value, as so far outlined, is presumed to lie in the fact that, for the most part, increases in land values are created by the community, or may properly be so considered—especially when they result from the expenditure of public funds and from the natural growth of the community.

In a case of this kind, however, in which the increase in rental value is quite clearly due in part to the expenditure of funds, and since the funds were private and not public funds, it would seem that some adjustment should be made in the application of the New Plan.

It would seem equitable to assume in this case, for example, that the increase in rental value of land on the island was

created by the syndicate *to the extent of the amount of money spent by the syndicate to develop the island*. In that case it would be feasible to make an allowance for that fact in levying the tax on the increased rental value. This might be done as follows:

Allowance for the cost of development. Let us say that the syndicate has spent a sum for developing the land amounting to $2500 an acre. Translated into terms comparable to rental value, this means that the syndicate has given up an income of 6% of $2500 or $150 a year to develop each acre. If that were the case, we might say that the syndicate, by the expenditure of its own funds, has contributed an income of $150 a year toward increasing the rental value of each acre. That is, since there was an increase of $400 in the rental value of each acre, it would then be assumed that of this $400 increase the syndicate contributed $150. On that basis the tax might be levied, not upon the whole $400 increase in rental value, but upon the remaining $250 increase presumed to be contributed by the presence of the community.

If the increase of $250 is taxed at 50%, according to the New Plan, the syndicate would pay a tax of $125 per acre. (There would be no *base tax* in view of the supposition that there was no assessed rental value before the project was begun.)

Subtracting this tax of $125 a year per acre from the rental value of $400 per acre, we obtain $275 per year per acre as the profit to the syndicate on the $2500 invested per acre to develop the land. This would be an 11% profit—corresponding to 11% interest on the investment.

Extension of the plan. We have seen that the supplemental plan—suggested above for use when a portion of the increase in rental value of land seems obviously to have been created by the expenditure of funds by the owner of the land—consisted in reducing the amount of assessed increase in

rental value by an amount equal to 6% of the funds, spent by the owner which presumably contributed to the increase in rental value of the land, and then applying the tax merely to the remaining increase in rental value.

If this seems fair and feasible in the case of a large investor in land development, there would seem to be no reason why it should not be applied in general, if desired and if feasible. That is, it might be applied to a case of one acre in exactly the same way it was applied *per acre* in the case mentioned above. It would rest with the taxing authority or with the legislature to determine whether or not, or to what extent, such a supplementary plan would be fair and feasible.

Preparing land for use. There are various occasions on which it is necessary to spend money on land in order to prepare it for use. Thus, if there is a swamp at the edge of a growing city, the time may come when it is necessary to fill the swamp to make the land suitable for use. Again, in a hilly city, it may be necessary in some places to blast away a portion of a hill to make level land suitable for a building. Also when a building has become obsolete or unsafe it may be desirable to demolish it so that the site can be used for a more modern building. The following example will illustrate the possible procedure in such a case.

An obsolete building. Let us say that in a given city it is desired to tear down a condemned theater and to use the lot on which it has stood as the site of a new bank building. Demolishing the obsolete building may entail considerable expense. The interest on the money so spent may properly be deducted from the rental value of the bare lot for purposes of taxation. If the rental value of the bare lot is $1000 a year, and if the interest on the cost of demolition is $100 a year, the rental value of the lot for taxation purposes may properly be considered as $100 less than the $1000, or $900 a year.

Chapter V

BENEFIT ASSESSMENTS

The New Plan in relation to "benefit assessments." It is sometimes claimed that a method of taxation called "benefit assessments" is comparable to the taxation of increases in rental value such as comprises the New Plan recommended in this book. Indeed, it is believed by some that benefit assessments accomplish the purpose that the New Plan is designed to accomplish and that consequently the New Plan is not needed.

To be sure there is a similarity of purpose between benefit assessments and the New Plan, but a comparison of the two reveals the fact that the plan of benefit assessments has very positive disadvantages which are not inherent in the New Plan. Let us compare the operation of the two plans and see why this is so.

The plan of benefit assessments is generally used when an increase in land value in a certain area is expected to result from the expenditure of public funds for certain improvements such as street paving. In such a case the estimated increase in capital value of any plot of land is considered to be a "benefit" which the landowner receives as a result of the improvement; and an assessment is then levied upon that land in proportion to the amount of the presumed "benefit."

For example, let us assume that a city plans to spend a million dollars widening and repaving a given main artery from the center of the city to a suburb. Let us say that it is assumed by the authorities that the principal beneficiaries of this improvement will be the owners of the property along this

artery. Let us say that computations show that the cost of the improvement will be met if each property owner along the artery be assessed at $25 a front foot. Let us say that it is estimated that the increase in capital value of land along the artery will more than equal the total amount assessed. The city council may then decide to levy an assessment of $25 a front foot upon all property abutting the artery. This would be called a *benefit assessment.*

Let us now compare the effect of such a benefit assessment with that of the New Plan.

As we have seen, according to the New Plan there would be no assessment of the kind described above. Instead, when the improvement had been made, and there was an obvious increase in rental value of land along the new thoroughfare, an additional tax would be levied on each parcel of land equal to 50% of the increase in rental value of that land—there being no increase in tax unless there was an increase in rental value.

Disadvantages of the plan of benefit assessments. Here, then, are the disadvantages of the plan of benefit assessments which are not inherent in the New Plan of taxation of increases in rental value.

Assessment not in proportion to benefit. One disadvantage of the benefit-assessment plan is that there is a high degree of probability that the assessments are not in proportion to benefits. In the case mentioned it is quite possible that the rental value of land in the suburb will increase because of the greater ease of access to the city. The owners of such suburban property may not be assessed at all, in which case the whole cost of improvement may be met by owners of land along the artery, whereas according to the theory of benefit assessments, the suburban landowners whose land increased in rental value as a result of the public improvement should

have been assessed also. It is unfair to assess some of the landowners who benefit and not others.

The advantage of the New Plan is that it assesses all landowners in proportion to the benefits they receive, in increased rental value, from the public improvement, regardless of whether their land is adjacent to the imrovement or not.

Difficulty of determining benefits. In reply to the above objection to the plan of benefit assessments it may be said that it is too difficult to determine in advance what the effect of the improvement will be upon land in the suburb. If an estimate is made of the probable benefit to be received, and the land in the suburb is assessed accordingly, it may be found later that the portion of the assessment that had been borne by the suburban landowners turned out to be too great or too little.

Indeed, it is exactly that difficulty that constitutes the second disadvantage of the so-called benefit-assessment plan. If the New Plan of taxation of increase in rental value is in effect, no advance estimate need be made of the probable increase in capital value of land either along the artery or in the suburb. Each year a careful analysis will reveal the actual increase, if any, in the rental value of all the land that may be affected by the public improvement both along the artery and in the suburb, and the tax will be increased accordingly. This means that if the benefit to the suburban landowners is slight, their increase in tax will be slight, whereas if their benefit turns out to be as great as the benefit to the landowners along the artery, their contribution in increased taxes will equal that of the landowners along the artery.

The second advantage of the New Plan over the benefit-assessment plan, therefore, is that it does not require a guess to be made in advance as to what the relative benefits of the improvement will be to landowners in various localities. It is by virtue of the assessment of increases in rental value *after*

they occur that the the New Plan taxes landowners directly in proportion to benefits, whereas the so-called benefit-assessment plan may not and probably often does not.

Difficulty of payment of assessment. It has already been pointed out that the "benefit" that is presumed to accrue to a landowner, and which is taxed by the benefit-assessment plan is the estimated increase in capital value of the land that is expected to result from the public improvement. Now it may take five or even ten years for the full increase in capital value so produced to come into being. If a landowner will have to wait ten years for the full increase in capital value that his land will attain, it may well be a hardship on him to have to pay an assessment which might constitute a considerable portion of that estimated increase in capital value, in advance of the public improvement, or even immediately following it.

A city can usually issue bonds for a major improvement and thus, in effect borrow the money, and so be able to wait for reimbursement from landowners, by way of increased taxes, until the contemplated increase in the rental value of their land has actually taken place. Whereas, if a landowner is assessed $1000 with only the expectation of getting it back in increased rental value or capital value in ten years he may have to borrow at some sacrifice in order to pay the assessment.

A third advantage of the New Plan over the benefit-assessment plan, therefore, is that it enables any landowner to obtain an increase in rental value of his land before he is required to pay any assessment in the way of additional tax. And it will be shown in a later chapter that in all ordinary cases the money for the additional tax will be forth coming from the increase in rental value, thereby working no hardship on any landowner.

Benefits taxed too lightly. A fourth disadvantage of the benefit-assessment plan is that in many instances it may be

too lenient. For example, let us assume that an assessment of $25 a front foot is levied upon land abutting the artery mentioned above. The owner of a lot of 100 front feet will pay an assessment of $2500. Let us say that in advance of the public improvement his land is "out in the country," being say five miles from the center of the city. When the street is narrow and rutty few persons travel it and no one will lease the land for the erection of a store or for other business. But with the new boulevard passing his land, stores are rapidly built farther and farther from the center of the city, so that, let us say, his property becomes part of a tract suitable for a new shopping center. Suddenly he finds he can lease it for $5000 a year. In that case, under the present plan, the tax would presumably be raised to about $1000. If that were so, he would still retain a net return of $4000, which, capitalized at 6%, would indicate a capital value of $66,667. This might be an increase of $60,000 in capital value over what he could have gotten for the land before the improvement was contemplated.

When a community is in dire need of funds for building new schools, libraries, recreation centers, for buying new public parking places, for the paving of more streets, for paying better wages to teachers and others, etc., it seems unrealistic to allow a fortunate landowner to retain a profit of $60,000 in capital value of land with the payment of an assessment of only $2500.

With the New Plan, if the rental value increased from a negligible amount to $5000, approximately $2500 a year would be collected in taxes from that property, still leaving the landowner a "free gift" from the community of approximately $2500 a year. Yet the taxes so obtained under the New Plan resulting from the public improvement as a whole, might net the city an increase in revenue of a million dollars.

A fourth disadvantage of the benefit-assessment plan,

therefore, is that in many instances it may be leaving too large a share of the benefit to the landowner.

(Mention of the above supposed case of the newly-paved artery was prompted by what has actually happened in St. Petersburg. Formerly a ten-mile, bumpy road led from the city to the suburb, Treasure Island. The land along the road for about nine of the ten miles was vacant, except for a few scattered buildings. Abandoned streetcar tracks occupied much of the right-of-way, leaving two lanes, each so narrow that parking was impossible, even if there had been any need of parking—which there wasn't. Quite recently, at great expense, the ten-mile highway was nearly doubled in width and smoothly paved. The effect was remarkable. On what was a mile of nearly vacant land along the highway adjacent to the city, stores are built up almost solid. A swamp that was called the "Goose Pond," has become a shopping center called "Central Plaza," with parking space equivalent to six city blocks—usually full! Land values in the vicinity are fabulous. Doubtless the experience of St. Petersburg can be duplicated in many other cities.)

Danger of loss of benefit. It has been said that in certain instances the benefit-assessment plan may leave too large a share of the benefit to the landowner. On the other hand there are instances in which the disadvantage works the other way. That is, it is possible that the benefit derived by the landowner may be less than the assessment, or indeed, that he may receive no benefit at all.

For example, during the boom days of 1927-29, certain cities undertook multi-million-dollar improvements which were expected to increase land values greatly and for which high benefit assessments were made. In one instance, it is reported, the assessment for a costly street opening was $10,000, "payable in cash at once" on a twenty-foot store front. When

the depression struck, land values failed to increase as expected, and indeed some decreased. This meant that the store owner mentioned, who also owned the land, paid an assessment of $10,000 for a benefit which he may never receive.

Under the New Plan, no additional tax assessment would have been levied unless and until there was an acual increase in rental value. The store owner mentioned would have paid nothing in additional tax unless and until his land showed an increase in rental value. To the extent that his land did increase in rental value prior to the depression, his tax would have been increased accordingly—though only to the extent of half that increase in rental value—and when the depression struck, if the increase in rental value was lost, the tax would be reduced to its former amount. If the rental value went still lower, the tax would be further reduced. There would be no hardship such as would be exemplified by a store owner paying $10,000 for a benefit he did not receive.

Community stands the loss. To be sure, under the New Plan, if the project had been completed on borrowed money and if, because of the depression, the city was unable to obtain the expected increase in tax revenue and so redeem its bonds it would have to continue paying the interest on the borrowed money until such time as the economy had recovered sufficiently that new revenue enabled the city to pay its debts. The misfortune caused by the depression would thus be borne by the community as a whole and not by the unfortunate store owners.

A fifth disadvantage of the benefit-assessment plan, there fore, is that in the case of a depression or other economic cause of failure of a project to create the benefits for which assessments are made upon individual landowners, those landowners may go bankrupt because of heavy assessments for benefits not received; whereas, under the New Plan, no such

heavy penalties would fall upon individual landowners and the loss of the expected benefits would be borne by the community.

Subsequent loss of benefit. Elsewhere it has been pointed out that there are occasions other than a depression in which the rental value of land may be caused to decrease as when an airport in the vicinity becomes too noisy. This means that even after a landowner has received a benefit in the way of increased capital value of his land, he may subsequently lose that benefit because of a later decrease in the capital value of his land.

No one would think of refunding an assessment once made on land for a public improvement because the capital value of the land decreased. But if an assessment has been made for a benefit that was first received and then lost through no fault of the owner, the burden to the landowner is just as if the benefit had not been received in the first place.

Again the advantage of the New Plan over the benefit-assessment plan is that the latter plan makes no allowance for the landowner when a benefit once received has been lost, whereas the New Plan does.

Five distinct disadvantages of the benefit-assessment plan. As has been said, the so-called benefit-assessment plan is designed to accomplish a purpose similar to that of the New Plan, namely to let landowners contribute a portion of the cost of a local public improvement from which they are presumed to derive a special benefit and to pay in proportion to the benefit presumed to be received. We have seen, however, that the benefit-assessment plan has five distinct disadvantages which are all eliminated by the New Plan.

These are:

(1) The amount of the assessment is often not at all in proportion to the benefit.

(2) It is more difficult to foretell possible future benefits for purposes of assessment than to determine actual increases in rental value as they occur.

(3) It is more difficult for a landowner to pay an assessment on an expected future increase in capital value than to pay as tax a portion of the increase in rental value actually received.

(4) It often permits too large a share of the benefit to accrue to the landowner.

(5) It is possible under the benefit-assessment plan for a landowner to pay a heavy assessment for expected benefits which are never received, or which are received but then lost.

Reasons for the superiority of the New Plan. The superiority of the New Plan over the benefit-assessment plan can be understood clearly if we stop to consider the fundamental weaknesses of the benefit-assessment plan.

One of these weaknesses is that it requires that a *guess* be made as to what will happen to land values *in the future,* whereas the New Plan takes account only of *present actual* land values.

A second weakness of the assessment plan is that it involves payment in advance for an undetermined anticipated benefit, whereas the New Plan permits payment after the benefit has been received and in accord with that actual benefit.

A third fundamental weakness of the benefit-assessment plan is that it deals with capital value instead of rental value. It has been shown that capital value is a sensitive quantity that varies according to the tax rate and even according to the capitalization rate, whereas the rental value is independent of these factors and is consequently far more stable.

Chapter VI

THE INEQUITY OF THE CAPITAL GAINS TAX

The capital gains tax as a precedent. In the capital gains tax we have a precedent for the taxation of increases in rental value of land. The law provides that if an individual buys a tract of land for $2000, for example, and sells it a year later for $3000, thereby making a profit or 'capital gain' of $1000, he must consider 50% of this capital gain as taxable income. He must therefore pay an income tax on $500 of the $1000 capital gain. If he is in the 40% income tax bracket, his capital gains tax will be 40% of $500 or $200. This amounts to a tax of 20% of the capital gain.

There seems to be little doubt that the law providing for the capital gains tax was a definite attempt to take away from the landowner a portion of any benefit he had derived in the way of increased value of land—presumably on the assumption that it was a community-created increase—in part at least.

The capital gains tax unfair. A careful examination of the operation of the capital gains tax shows that it is unfair. Here is why.

Let us say that in a rapidly growing city land values are rising rapidly so that each year land values are 10% higher than the year before. This would mean that a tract of land that was worth $10,000 in 1955 would be worth:

$11,000 in 1956,	$17,715 in 1961,	$41,767 in 1970,
$12,100 in 1957,	$19,486 in 1962,	$50,538 in 1972,
$13,310 in 1958,	$23,577 in 1964,	$73,993 in 1976, and
$14,641 in 1959,	$28,527 in 1966,	$108,222 in 1980.
$16,105 in 1960,	$34,518 in 1968,	

Now let us consider two men, A and B, each of whom owned a tract of land in 1955 worth $10,000. Let us say that Mr. A has leased his land for the building of a commercial establishment and does not sell it. Even by 1980 he will have paid no capital gains tax in spite of the fact that, with his land now worth $108,000, his accrued capital gain is $98,000.

On the other hand, let us assume that each year Mr. B. sold his land at a profit and bought other land with the proceeds. Let us assume that each year his capital gain was 10% of the cost price, the same as the accrued capital gain on Mr. A. But of course Mr. B. had to pay a capital gains tax each year. For convenience of computation let us assume that Mr. B's capital gains tax amounted each year to 20% of his capital gain. That would mean that his capital gains tax each year was 1/5 of the 10% gain in capital value; and this would mean that his *net* capital gain was only 8% of his investment each year.

Now if we make the same kind of computation as above, using 8% per year instead of 10% as the rate of increase of Mr. B's land assets, we find that those assets increase as follows.

$10,800 in 1956,	$19,987 in 1964,
11,644 in 1957,	27,182 in 1968,
12,597 in 1958,	37,010 in 1972,
13,605 in 1959,	51,339 in 1976, and
14,693 in 1960,	69,830 in 1980.

Thus we see that because Mr. B chose to buy and sell land at a profit each year, and because he had to pay a capital gains tax each time he did so, his land assets in 1980 were only $69,830; whereas because Mr. A chose not to sell his land, his land assets in 1980 were over $108,000. This is unfair to Mr. B.

We can understand why there is this difference in the two men's final land assets if we consider that Mr. B lost the in-

terest on all the payments of capital gains tax that he was compelled to make, whereas Mr. A did not because he didn't make any payments of capital gains tax on his accrued capital gains. And in 25 years the compound interest on those capital gains at 10% amounted to a great deal. (Strictly speaking, Mr. B lost the opportunity to reinvest those capital gains payments in a way to make a 10% capital gain.)

Tax accrued capital gains. It may seem at first thought that the way to remedy the defect in the present capital gains tax is to make it apply to accrued capital gains as well as actual capital gains resulting from the sale of land. But this procedure is impractical.

For example, let us say that Mr. A and Mr. B have each bought a tract of land for $10,000, and that during the year each tract of land has gone up in market value to $15,000. Let us say that Mr. A sells his tract but Mr. B does not. The capital gains tax on Mr. A's gain of $5000 at say 20% would be $1000. Now suppose the same capital gains tax of $1000 has to be paid by Mr. B on his $5000 of accrued capital gain. In Mr. B's case the actual cash gain is only the increase in the net return from say $600 to $900—a gain of only $300 during the year. It will be no hardship for Mr. A to pay a capital gains tax of $1000 out of the $5000 profit he made selling the land. But to impose a capital gains tax of $1000 on Mr. B, whose actual cash gain during the year was only $300 might work a hardship on Mr. B. Indeed, as we see, the capital gains tax would be more than the whole of the increased rental value of the land for the year.

We see, therefore, that although the capital gains tax has a worthy purpose, namely to require a landowner to share with the community a portion of the benefit he received from a community-created increase in the value of his land, it is nevertheless unfair. And we see that the attempt to make it fair by

taxing accrued capital gains would be impractical. Moreover, in most cases the portion of the capital gain going to the community is only a fifth, or possibly a fourth (depending upon the taxpayer's income tax bracket) whereas it would seem that the community's share of a community-created increase in land value should be at least half.

The New Plan of taxing increases in rental value accomplishes the purpose of the capital gains tax and eliminates the defects of the capital gains tax.

Chapter VII

DETERMINING RENTAL VALUE

Rental value defined. For practical purposes we may define rental value by saying that the rental value of a plot of land is the amount of rent a tenant is paying the owner, or the amount of rent a prospective tenant would be willing to pay, or could afford to pay, for the use of the land.

In order to put the New Plan into effect it is necessary to assess the rental value of all land. This is comparatively simple, of course, in the special case in which a plot of land without improvement is being rented from the owner by a tenant. But since that is seldom the case, it is necessary to devise indirect methods of determining rental value in those cases in which the land is not being rented. The indirect methods of determining rental value are comparable to the indirect methods that now have to be used by assessors to determine the capital value of land.

Determining rental value. The various methods, direct and indirect, for determining rental value of land are as follows.

Note rentals. One of the starting points for the assessment of the market value of land, as explained in assessors' manuals, is to note the sales that take place from time to time, and to consider that the price for which a plot of land has sold—provided it was a normal sale and not a forced sale—is a valid indication of the true market value of that land and of similar land adjacent to it—making due allowance for what is known as 'corner influence', etc.

In a similar way, the rental value of land may be assessed by taking note of actual rentals and assuming that actual rentals are valid indications of true rental values, not only of the land in question but of similar lands adjacent to it, even though these similar lands are not being rented.

Note sales. Having made the most possible use of data on actual rentals, the next step is to note sales and deduce rental values from the sale values. This can be done in the following manner.

Let us say that the rate most commonly used by landowners and prospective buyers of land, in capitalizing net return for purposes of appraising the market value of land, is believed to be about 6%. This means that the net return from a plot of land that has just been sold may be presumed to be 6% of the sale price. Now we know that this net return is the portion of the rental value that is left after the tax has been paid. In other words, the rental value of the land equals the net return plus the tax. To find the rental value of a plot of land that has just been sold, therefore, we have merely to find 6% of the amount for which the land sold and add the last tax that was paid on the land.

For example, let us say that a certain plot of land has just sold for $10,000. Since this sale price is presumably the capitalization of the net return, we know that the net return was probably 6% of $10,000, or $600. Let us say that the last tax that was paid on the land was $250. The rental value of the land may be taken, therefore, as $600 plus $250, or $850.

Inflated purchase price. It should be borne in mind, however, that in certain instances the actual amount paid for a plot of land may be considerably in excess of the capitalization of the actual present net return. This is true when the purchaser anticipates a substantial increase in rental value in the near future.

For example, in Tampa Bay there is a small, unnamed island comprising at most four acres. It is swampy and almost inaccessible because of being almost completely surrounded by shallow water. It happens however, that a syndicate proposes to greatly expand the island by replacing the shallow water around its edges with sand dredged from the bay. This island will then become one of a string of islands connected by bridges and leading to Mullet Key, a large island that is being considered by the state for conversion into a pleasure resort with a spur leading to it from the new Sunshine Skyway.

In anticipation of future profits to be made from the dredging venture and the sale of water-front lots, the syndicate recently purchased the unnamed island for $19,000. Obviously this purchase price does not in any way reflect the *present* rental value of the island.

Rental values for the purpose of taxation should be *present* rental values. There is plenty of time in the future to note actual increases in rental value and to make new assessments accordingly.

Indeed, it should be clearly understood that this is one of the chief advantages of the taxation of rental value. There is no need to guess at the future.

Assessing land apart from buildings. If the New Plan is put into operation in a community in which land and improvements have been assessed together, there is an initial problem in the matter of assessing the land apart from the buildings and other impovements. There are two methods of doing this. By one method the determination of the proper assessment of the rental value of the land involves first assessing the value of the buildings and deducting this value from the total market value of the property to find the market value of the land alone, and then finding the rental value of the land from its market value as explained.

There are two steps in assessing the value of a building. The first step is to estimate the cost of replacement of the building by taking into account present building costs. This will tell what the building would be worth if new. The next step is to determine the amount of depreciation the building has undergone, depending upon its age and in view of any obsolescence. This amount of depreciation is then deducted from the cost of replacement to find the actual value of the building.

If an assessment has been made of the capital value of the land and buildings together, the value of the buildings may then be deducted from the total assessment, as mentioned above, to find the proper assessment of the capital value of the land alone. The rental value of the land alone may then be obtained from its capital value as explained above.

The alternative method. When the rental value of a building together with the land can be the more easily evaluated, either by noting the actual rent that is being paid for the building and land or by noting the rent paid for a similar building on a similar lot, the following alternative method may be used for finding the rental value of the land.

Let us say that in a particular case the rental value of a building and its lot is evaluated at $10,000. The next step is, then, to appraise the capital value of the building as described above—by obtaining the cost of replacement and allowing for depreciation. Let us say the building appears to be worth $60,000. Next, a determination may be made of the customary percents of the value of the building that building rents tend to be. We know that in view of depreciation and obsolescence, the owner of a building must charge a rent at a percent of the worth of the building that is greater than the common rate of interest on borrowed money—since money does not depreciate or become obsolete in the way that a building does. Let us say

that the average rate of rental of buildings is 10% of the worth of the building. We may then take 10% of the $60,000, or $6000, as the appraised rental value of the building at the time. Subtracting this from the estimated $10,000 rental value of the building and lot leaves $4000 as the rental value of the land only.

Increase in the rental value of a building. It is entirely possible that with the growth of a community the profits to be derived from the use of a given building as a store, office building, theater, bank, or the like, will increase, thereby making it appear that the rental value of the building had increased.

It should be understood, however, that the rental value of a building depends only on its physical condition, its cost of construction, deterioration, obsolescence, etc. If a building has been remodeled, redecorated, enlarged, or otherwise increased in usefulness, it may be considered as having an increased rental value on that account. But if there has been no change in the building except normal deterioration, any increase in profits from its use which can be attributed to the growth of the community, the expenditure of public funds, or similar cause, must be considered as an evidence of the increased rental value of the *location* and not of the building. It is location value that we call land value.

Assessing vacant land. We have learned that if an individual owns a lot for which he paid $1000 and lives in a house on it, his total cost per year of owning the lot is the sum of the tax he pays on it (which might be $20) plus the interest which he has lost on the $1000 that he paid for the lot (which might be $60). If he is willing to pay this yearly cost of owning the lot in lieu of paying rent we may consider, therefore, that the rental value of the lot to the owner—the value he gets by living on it—is $80 a year. We have come to think of the rental value of a plot of land as either the rent that is

actually being paid for it by a tenant or as the rental value to the owner which he derives from the land if he uses it himself.

In the case of a vacant lot—one not being rented or used by the owner—we might say that the rental value, in the light of the above concept, was zero, because no value was being derived from it either in rent or by using it.

It is a well established principle, in the United States,* however, that in the case of a vacant lot among other lots that are built upon, no allowance can be made for the fact that the owner of the lot is obtaining no income from the lot by renting it and is obtaining no value from it by using it himself. That is, in all such cases, the vacant lot must be assessed in rental value the same as comparable adjacent lots that are used.

It is for this reason that rental value was defined above in part as the rent a prospective (or potential) tenant would be willing to pay for the lot or could afford to pay for it—even if the owner does not offer it for rent.

Discouraging the holding of land out of use. One might ask: What is the basis for the above-mentioned established principle of taxation? That is, if the owner of a vacant lot is obtaining no income from it and making no use of it, why should he be required to pay a tax on it equal to the tax on a comparable adjacent lot that is being used and from which an income is being derived? The answer is that the principle of taxing vacant land equally with comparable adjacent used land discourages the holding of land out of use.

For example, let us say that a community gives promise of growing at a fairly rapid rate, and an investor considers buying some vacant land and merely holding it idle while wait-

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* According to Madsen, in Great Britain, idle land is not taxed, no matter how valuable it may be. (See *Land Value Taxation Around the World*, p. 142.)

ing for the expected increase in market value. He may be inclined to do so if the tax on the land is low. On the other hand if the tax is equal to that on comparable adjacent used land, the investor may feel that while he waits for the expected increase in market value, the yearly taxes will eat up a substantial portion of the expected profit. Hence he may decide against the plan. However, another investor might well decide that if he could make use of that land during the time it was increasing in capital value, his total profit from the ownership of the land (the profit from the use and the profit from its increase in market value) would make the purchase of the land a good investment.

Thus we see that the principle of imposing a tax on vacant land equal to the tax on comparable adjacent used land tends to discourage an investor from buying it and holding it idle, whereas it would not discourage an investor from buying that same land for use. Indeed, this principle of taxation encourages putting land to its very best use. This is better for the community.

An analogy. No one would question the propriety of a theater's refusing to refund the cost of a theater ticket because the purchaser had not attended the performance. His holding the ticket prevented the theater from permitting anyone else to occupy the seat and it would be proper to say that it was the fault of the ticket holder that he did not occupy the seat or dispose of the ticket to someone who could.

Similarly, we must realize that there is a limited amount of land and any landowner that holds a plot of land out of use prevents someone else from using it in the same way that the ticket holder prevents someone else from attending the performance. In the light of this analogy it is reasonable that a community should tax a vacant lot the same as a neighboring one just like it even though the latter may be in use.

A fault in the present procedure. One of the principal faults that economists find with the working of the present system of taxation is the tendency of tax assessors to assess the land at the same value from year to year. In a growing community, however, this procedure results in an abnormal increase in market values. (This is explained in Appendix F.) But eventually it is necessary to reassess the property. If, in the meantime, there has been a decided rise in land values, the property may need to be reassessed at a considerably higher amount. In that case market values of land are likely to slump and cause many landowners to have a portion of their investment in land confiscated. (This also is explained in Appendix F.)

Need to reassess the rental value of land annually with a minimum of expense. The reader may feel that the expense of reassessing all the land in a city every year—as recommended in this book—would be prohibitive. This might well be the case if it were necessary for the assessors to visit and reappraise each parcel of land independently each year. But that is not necessary. An approximation to the true increase in rental value from one year to the next may be made graphically with sufficient accuracy for practical purposes. This method is as follows.

The use of extrapolation. First, a graph would be constructed for the city as a whole to show the upward trend of rental values for say the past 25 years. Rental values for the past years could be obtained from market values in the manner described above—that is, by the following formula, using 6% as the current capitalization rate.

$$\text{Rental value} = 6\% \text{ of Market value} + \text{Tax}$$

The graph so obtained would be similar to Fig. 1.

The most probable aggregate amount of rental value of the land of the city on a given date could then be obtained

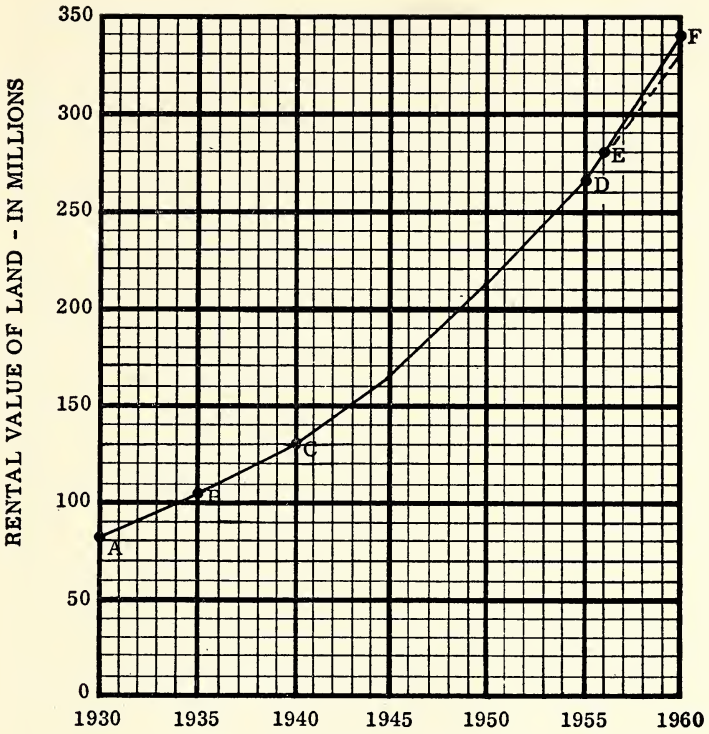

Fig. 1

Hypothetical Graph Showing the Possible Growth of Rental Value of Land in a Typical City

from the graph by the method of extrapolation, as illustrated in the following example.

Let us say that the curve from A to D in Fig. 1 represents the growth of the total rental value of the land in a city from 1930 to 1955. Point A on the graph shows, for example, that in 1930 the rental value of the land was $80 million. Point B shows that in 1935 it was $104 million; Point C shows that in 1940 it was $130 million, etc. It would be sufficient for this purpose to obtain the rental value for points in time five year apart if the growth had been fairly steady.

Point D on the graph shows that in 1955 the total rental value was $265 million. Let us assume that it is desired to obtain an estimate of the total rental value in 1956. This may be done by extrapolation, that is, extending the curve, as shown by the dotted line, until it cut the vertical line representing 1956 (Point E). The height of this point, as shown by the vertical scale, represents a total rental value of $278 million. That is the most probable amount the total rental value will be in 1956.

Since the estimated increase in rental value from 1955 to 1956 is from $265 million to $278 million—an increase of $13 million—and since $13 million is 4.9% of $265 million, it would be sufficient for purposes of an approximate reassessment of the rental value of land in the city for 1956 merely to raise the assessment of each parcel of land in the city by 4.9%. At least this would be far better than making no reassessment at all when there is a very definite upward trend in rental values. However, further refinements are possible as explained below under the heading: Refinement of the method.

Correction of the graph. If it is impractical to obtain a true reassessment of rental value of the city before 1960, say, the method of extrapolation would suffice up to 1959. Then when the actual reassessment is made in 1960, the dotted

portion of the curve, representing extrapolation, would be erased, a Point F would be plotted representing the actual rental value for 1960 and the curve would then be redrawn up to 1960, as shown by the full line. Thereafter the curve could be corrected in like manner every five years, if reassessments could not be made oftener.

A comparable case. Before the possible refinements are presented let us examine Fig. 2, which is a graph representing the growth of total assessments of the market value of property in Louisville, Ky., during the years from 1900 to 1925. Point A shows, for example, that in 1900 the total assessment of property in Louisville was $121 million. In 1905 it was $141 million, etc., and in 1925 it was $352 million (point B). If it were desired to obtain the most probable value of total assessments for 1926, this could be done from the graph by extrapolation—that is, extending the curve till it cut the vertical line representing 1926 (Point C). The height of this point as shown by the vertical scale represents a total assessment of $372 million. Actually, the total assessment in Louisville for 1926 *was* $372 million.

Refinement of the method. Rather than rely upon the graph for the city as a whole and reassess each parcel of land in accord with the percent of increase estimated for the city as a whole, it would be more accurate for reassessing land in different parts of the city to draw a graph separately for each section of the city, as for example:

(1) the heart of the business district,

(2) the surrounding business district,

(3) the 'commerical district' (warehouses, wholesale establishments, etc),

(4) the built-up residential sections,

(5) the newly building residential sections,

(6) the undeveloped sections, etc.

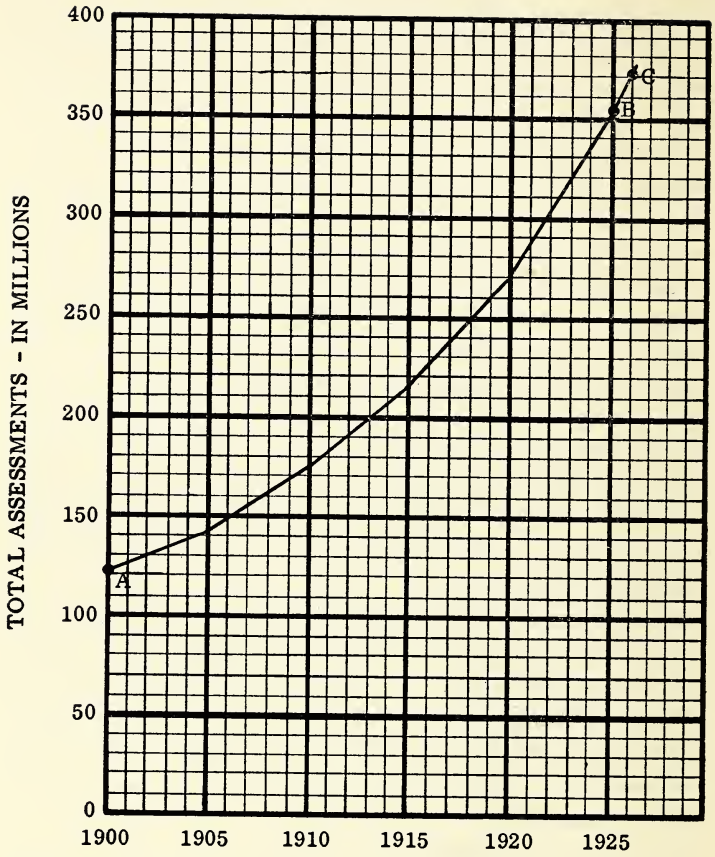

Fig. 2

Graph showing the Growth of Total Assessments in Louisville, Kentucky, from 1900 to 1925

In that case the reassessment that was made during those years in which no actual reappraisals of property took place would be made by increasing the assessment of the parcels of land in each district by a percent equal to the percent of increase in estimated total rental value for that district as obtained by extrapolation on the graph for that district.

Further refinements. In addition to the above refinement for estimating increased rental values, further refinements would be possible. For example, just as the assessors' manuals now explain how to make allowances for what is called 'corner influence,' etc., so the new manuals could provide formulas for making further corrections in assessment in special locations according to the recent improvements that had been made in the street or in the opening of a new shopping center or in the building of a new bridge, etc.

In building-up residential sections, account could be taken of the increase in percent of lots on which houses had been built, increase in school enrollment, and the like.

The fact remains that almost any approximation based upon observed tendencies, no matter how rough, is a better basis for the yearly reassessment of rental values than no approximation at all—that is, merely letting the assessments remain the same for five or ten years when it is well known that rental values are constantly increasing.

The virtue of the proposed method of intermediate reassessment by extrapolation is that for short periods, such as four years, it is almost as accurate as actual reappraisal would be, but the cost is negligible in comparison with the cost of a yearly reappraisal.

In practice it may be found convenient to appraise the land in one section during the year, the land in another section during the next year, and so on, repeating the cycle in, say, five years.

Inauguration of the New Plan. In the interest of uniformity it might be well to let the New Plan be put into effect in a state by the State Tax Commission.

Presumably the assessing of land values will need to be done by local tax assessors; but the work of the local tax assessors in the several localities of a state might well be coordinated by the State Tax Commission.

The first function of the State Tax Commission might be to draw up a state tax assessors' manual, explaining how to assess the rental value of land, as shown in this essay. If there appears to be any need for assessments of rental value to be less than actual rental value (comparable to the case of assessments of capital value, which are often only a given percent of the actual capital value), the ratio of assessed rental value to actual rental value should be uniform.

The assessors' manual should explain also the graphic method of determining probable increases in rental value for use when actual appraisal is not feasible.

The State Tax Commission would determine also whether the tax on excess rental value is to be 50% or some other percent, and presumably this percent should be uniform for the state.

The State Tax Commission may also determine what portion of the New Tax is to be considered state revenue. Undoubtedly a considerable portion of such revenue would be required for state highways and it would be proper, therefore, to provide that a portion of such revenue go to the state treasury.

The State Tax Commissioner may also establish the rules for taking account of the expenditure of private funds for the development of land for use as explained in Chapter IV.

Chapter VIII

COMPROMISING BETWEEN ACTUAL AND POTENTIAL RENTAL VALUE

Rental value on a broad base. We see from the considerations of the preceding chapter that if we are concerned with the determination of the rental value of lots on a broad base—such as an area comprising a square ten blocks long and ten blocks wide in a more or less homogeneous residential area—the problem is reasonably simple. It is principally a matter of striking averages or of extrapolation by the use of graphs as explained.

The rental value of a particular lot, obtained in this manner may be considered as its 'potential rental value'; that is, the rental value it would have if it were being used as profitably as the average lot in the area. We must realize, however, that even in the case of a plot of land that is under lease, the actual rent obtained by the owner may not be the same as the potential rental value assigned to the lot in accord with the broad base. This might be true, for example, because the particular lot contained an obsolete building for which no actual rent could be obtained; whereas, considered as the site of a modern building the lot would have a substantial rental value.

This possible difference between actual rent or rental value of a lot and its potential rental value may, under certain circumstances, present a real problem to a community or to a tax assessor as representing the community.

A case in point. Let us say that Mr. Jones has bought a tract of land on the outskirts of a town for the purpose of building a home with plenty of lawn, space for an outdoor

swimming pool, a tennis court, greenhouse, garden, etc., the tract being, let us say, equivalent to a city block. Let us say that Mr. Jones built the home, the pool, the court, etc., and lived comfortably while the city increased in population and home-building companies bought tract after tract in the direction of Mr. Jones's estate, and erected modern homes, each on a modest lot. Shopping centers have sprung up and the new residential sections have become increasingly popular until the rental value of individual lots adjacent to Mr. Jones's property has become say $200 a year, with say 20 lots to the block. This would mean, of course, that Mr. Jones's estate, which may be considered as comprising 20 lots, has now come to have a potential rental value of 20 × $200, or $4000 a year.

Let us say that Mr. Jones bought the tract twenty years earlier for $5000 on the basis of an estimated rental value of $400 a year. He had the house built of stone, with orangewood floors, mahogany walls, marble baths, etc. It would seem a shame to tear down the house, built to last a hundred years, to make room for some modern bungalows.

If Mr. Jones were to offer the estate for sale he might not get more than $50,000, considering that the house is old-fashioned (no central heating, no base plugs, noisy bathroom fixtures, etc.), and considering that the estate is now in the midst of a bunch of bungalows. And it might cost him $150,000 to replace the estate elsewhere. And after all, that is his home!

What to do? So the question arises as to what is the fair thing to do about the tax on Mr. Jones's land.

On the basis of the obvious potential rental value of the land of the estate it would have to be taxed as having a rental value of $4000 a year as against the original $400 a year. If Mr. Jones tried to rent the estate he might not get more than $4000 a year for the land and house together, whereas he would probably consider that the house and ground improvements were

worth at least $3000 a year, leaving only $1000 a year as the *actual* rental value of the land.

From one point of view we may consider that Mr. Jones is stuck with an estate of which the rental value of the land is only $1000 a year, but which has an obvious potential rental value of $4000 a year. From this point of view it would seem quite unfair to Mr. Jones to charge him a tax based on the full potential rental value of his tract of land. On the other hand it would seem equally unfair to the bungalow owners to tax their lots at four times the rate at which Mr. Jones's land is taxed. And it would seem unfair also to the community to forego the revenue from Mr. Jones's estate that could be had if the land were used for bungalows. Hence we see that a situation of this kind can present a real problem.

A partial solution would be effected if the tax authority took into account the cost to a bungalow builder of removing the stone house, filling the pool, tearing up the cement court, etc., and made the deduction in rental value equal to the interest on these costs, as suggested in an earlier chapter.

The compromise. In situations such as the above, a policy might be established by the community (state, county, or city) whereby a compromise was made between taxing the land of the estate on the basis of the actual rental value of the land as the property stands, and taxing it on the basis of the potential value of the land. The policy might include the suggested discount for the cost of removal of the building.

For example, if the potential rental value of the bare land of the estate was $4000 a year and the interest on the cost of rendering the land bare was $200 a year, bringing the adjusted potential rental value down to $3800, and if the actual rental value of the land was $1000 a year, the compromise might be to assess the rental value of the land of the estate halfway between $1000 a year and $3800 a year, or $2400 a year.

Let us see how this would work out in terms of taxes. If the New Plan had been put into effect when the rental value of the land of the estate had been assessed at $800 a year and the base tax was $200 a year, the tax based upon the present rental value of $1000 a year would be $300. (The base $200 plus 50% of the increase from $800 to $1000.) Based on the potential rental value of $3800, the tax would be $1700 a year; and based on the compromise assessed rental value of $2400, the tax would be $1000 a year. A tax of $1000 is just halfway between the tax of $300 and the tax of $1700. In a sense, therefore, we might say that the compromise would go halfway toward being fair to the bungalow owners and halfway toward being fair to Mr. Jones.

A similar compromise might be made in comparable cases, such as one in which a man owns an orange grove or apple orchard, of which the actual rental value based upon the growing of oranges or apples is small compared with the potential rental value the grove or orchard will have when absorbed into a growing residential area. Another comparable case is one in which the actual rental value of the land under a run-down theater is less than the potential rental value of that land as the site of a modern bank.

The form of compromise suggested above is not to be considered as an essential part of the New Plan, but merely an idea to be considered by any community or tax authority as a basis for avoiding injustice.

It will be remembered, of course, that the New Plan itself is already a compromise since it shares any increase in rental value of land equally between the landowner and the community (even though it may be wholly a community-created increase in rental value). Hence we might consider that a further compromise as suggested above would in reality go three-fourths of the way to favor the landowner.

Chapter IX

POSSIBLE REVENUE

Revenue derived by the New Plan. The purpose of the New Plan is to increase tax revenues, to make the distribution of taxes more equitable, and to do so without hardship to anyone.

An alternative method of increasing tax revenue, of course, is merely to increase the tax rate, but it has been shown that this method is not desirable, first, because it reduces market values and is likely to cause recent purchasers of land to have some of their investment in land confiscated, and second, because, as we have seen, a general increase in taxes on land may not fall upon landowners in proportion to the benefits received in increased rental value.

The New Plan is designed to avoid all injustice and hardship by preventing any confiscation of land values and distributing the tax directly in proportion to the benefits received.

However, under the New Plan it is necessary to rely entirely upon increases in rental value for an increase in tax revenue. Consequently, we cannot hope for a large increase in revenue immediately after the adoption of the New Plan. However, if increases in rental value are taxed at 50% as suggested, we may expect the future increase in revenue to be about twice as great as would be obtained by the present mode of taxation. For example, if public improvements have increased the rental value of the land in a municipality by 10% (say from $800,000 to $880,000), we would normally expect the assessments of the capital value of the land to increase

10%, and hence the tax revenue from this source to increase 10% (say from $200,000 to $220,000). This would be an increase of $20,000. But if the increase in rental value ($80,000) were taxed at 50%, according to the New Plan, the increase in tax revenue would be $40,000—twice as great an increase.

With future increases in revenue from land taxes under the New Plan occurring at about twice the rate obtainable under the present system, it would not be many years before the revenue from the New Plan would be far in excess of that which would have been obtained by the old plan.

In retrospect. We may get a good perspective on the effect of the New Plan by examining it in retrospect. Let us do so in the case of New York City.

Broadus Mitchell, in his *The World Wealth—Its Use and Abuse,* says that the assessed value of land in New York City is about $5,000,000,000, and that the City collects about $150,000,000 annually in taxes on land. This tax revenue represents a 3% tax on assessed value. We do not know at what percent of market value assessments have been made; but if we took a conservative figure of 83⅓% it would mean that the market value of land was $6,000,000,000, and that the tax was 2½% of market value.

Using 6% as the normal rate of net return, the rental value of land in New York City would be 6% plus 2½% or 8.5% of $6,000,000,000, or $510,000,000 a year.

Not too many years ago the market value of the land in New York City was one-half what it is now. At that time the rental value of land was presumably one-half of $510,000,000, or $255,000,000 per year and the tax revenue from land, one-half of $150,000,000, or $75,000,000, per year.

Let us assume that at that time the New Plan had been adopted. By now the excess rental value (amount of present rental value in excess of the rental value when the New Plan

was adopted) would be $510,000,000 less $255,000,000, or $255,000,000 per year. If that excess rental value were now taxed at 50%, according to the New Plan, the revenue from this increase in rental value would now be 50% of $255,000,000, or $127,500,000 per year. This added to the base tax of $75,000,000, would be $202,500,000 as the present annual tax on land, as against the present obtained $150,0000,000. This is an increase of $52,500,000 per year in tax revenue.

Think of the streets, highways and other improvements in and around New York City that could be made with an additional $52,500,000 a year.

This additional revenue would not have cost anyone any earned money. It would be merely a reduction in the free gift of the community to each landowner. As it is, that free gift to each landowner has been about 70% of the increase in rental value that took place while he owned the land; whereas, under the New Plan that free gift would have been reduced to 50%.

Where the money comes from to pay the new tax. We have said that the New Plan—the taxation of increases in rental value of land—will cause no hardship to anyone. It is interesting to understand just where the money comes from that the landowner will use in paying the *new tax*.

Appendix G examines three types of situation, (1) the case of an apartment house, (2) the case of a store, and (3) the case of residence property. It is seen in each case that the money that is needed to pay the *new tax* (if any) comes from the increased rental value of the land.

Chapter X

ECONOMIC EFFECT OF THE NEW PLAN

Discourages speculation in land values. One of the important effects of the New Plan would be that it would discourage speculators from buying land with a view to holding it out of use merely to sell it later at a profit.

For example, let us say that a speculator contemplates buying a vacant lot for $6000, anticipating that in six years its market value will double. As shown in Appendix H, the profit in that case, after paying the taxes for six years and paying a capital gains tax of 25% might be the equivalent of the compound interest on $6000 for six years at 8½%, making the investment worth while.

However, under the New Plan, with the same increase in rental value, the market value would increase less, the taxes during the six years would be more, and after paying a capital gains tax, the profit would be equal to the compound interest on $6000 for six years at only about 5%.

The speculator would undoubtedly consider this a poor investment and would refrain from investing in the lot merely to hold it for a rise in market value.

Encourages the best use of land. The owner of the lot mentioned above could deduce for himself the same facts that the speculator did regarding the wisdom of holding the lot any longer himself. He, too, would therefore decide that the profit to be derived from holding the lot vacant would be a poor return on the money he had tied up in the lot. He might decide to erect a building on the lot in order to obtain

an income from it, or, if he did not wish to invest in a building or did not have the money to do so, he would probably decide to sell the lot.

No mere speculator would buy it, for the reasons we have seen. The person who bought it would be one who contemplated putting it to use—the best use he could make of it. He might build an office building on it and rent offices or build a store building to suit a tenant who might wish, for example, to open a department store or the like, or lease the lot to someone who would build upon it.

Unlike the speculator, the new owner of the lot, having built upon it, could charge the tenant the full rental value of the lot. Out of this income he could pay the taxes and retain a net return equal to 6% interest on the amount invested in the land. (Of course if the owner built upon the land himself, the rent he charged would include also a proper return on the money he invested in the bulding, etc.)

In addition to getting a fair return on all the money invested in the land and building, the new owner would benefit from any increase in the rental value of the land—such as was anticipated by the speculator. If at the end of six years the rental value of the land had doubled, yielding to the owner an additional gross income of $480 in increased rental value, he could pay the additional $240 tax out of this $480 and still retain an added net income of $240 a year, without the investment of any more capital.

Thus we see that the New Plan encourages the putting of land to its best use.

Will not discourage the purchase of land for use. We have seen that the New Plan will discourage the buying of land for speculation, and the holding of land out of use by those who own it. The question might be asked: Will the New Plan discourage persons from buying land for use, on account

of the higher taxes? The answer is No and this is the reason.

Let us say that the rental value of land has risen from $800 a year to $1600 a year. We have seen how under the present system, the market value of the land would tend to rise from $10,000 to $20,000 and the tax from $200 to $400.

It can be shown, however, as explained in Appendix D, that under the New Plan the rise in tax would be from $200 to $600 (instead of $400), and the rise in market value would be from $10,000 to only $16,667 (instead of to $20,000).

The question in this case is: Would a prospective purchaser be discouraged from buying the land after the rise in value under the New Plan because the tax was then $600 instead of $400?

To answer this let us realize that if the prospective buyer has only $16,667 in ready cash he will be able, nevertheless, to buy the land, "free and clear," under the New Plan, whereas, if the price were $20,000 under the present system, he might have to borrow the additional $3,333 needed. If he is able, out of the rental value of the land, to pay $400 in taxes and $200 in interest on the borrowed $3,333 (6% of $3,333 is $200), he would be able to pay a tax of $600 with no interest.

On the other hand if the prospective purchaser does have $20,000, but needs to pay only $16,667, he will have $3,333 left over, which, invested at 6% will yield the $200 a year necessary to pay the additional tax.

We can say, therefore, that the New Plan will make no difference to the prospective buyer so far as the cost of buying or owning the land is concerned. Under the New Plan the buyer saves enough in purchase price so that the interest on that saving will pay the additional tax.

However, the New Plan will make a difference to the prospective buyer in another respect.

We have seen that in the above case the New Plan would

cause the purchaser to pay an additional tax of $200 to the city, but we saw that the present system would not save that $200 a year to the purchaser because it would go either to a mortgage holder as interest on the $3,333 borrowed, or to the previous owner as interest on the additional $3,333 which the buyer would have to pay under the present system. (The purchaser would lose that interest).

Under the New Plan, therefore, the new owner would know that the city was obtaining more revenue than otherwise and would therefore be able to make more improvements than otherwise in streets and highways and in other ways that would increase the rental value of his land more than would be possible under the present system. And since the New Plan allows the landowner to keep 50% of all the increase in rental value of land that takes place during his ownership of it, the prospective buyer, under the New Plan, might expect to receive 50% of increases in rental value which would not have been made possible under the present system.

The answer to the question: Would the New Plan discourage the buying of land for use? is: No—if anything, it would encourage such buying.

Encourages the expenditure of public funds for improvements. We have seen that from the time the New Plan is adopted the increase in tax revenue, resulting from any increase in the rental value of land, would tend to be about twice as great under the New Plan as under the present system. (Actually, in any area in which the tax rate is such as to equal less than 2% of the market value of land, the New Plan would cause an increase in revenue of more than twice the increase that would be had under the present system.)

Studies of the increase in land values brought about by the building of the Gulf Freeway in Houston and the Bronx River Parkway in Westchester County, N. Y., show that the

building of a superhighway increases land values very greatly —enough so that the additional revenue obtainable by the New Plan by virtue of these increases in land values will pay the total cost of the superhighway very promptly. (See Appendix A.)

We have seen also, that, with the New Plan in effect, whenever any street or highway is improved, one-half of the benefit of such building or improvement in the way of increased rental value still goes to the owner of the land thus benefited, as a free gift from the community. This fact, when understood, will constitute a very strong incentive to landowners to urge expenditure of public funds for the building of new streets and highways and the improvement of existing ones.

And finally, the New Plan will furnish the additional funds needed to facilitate the construction and improvement of streets and highways, by furnishing actual revenue that can be used in lieu of borrowed money.

The New Plan therefore, would be a great stimulus to the building and improvement of streets and highways.

Suggestions of economists for obtaining more tax revenue. The author of this essay has examined about 100 texts in economics in order to see what recommendations their authors made for increasing tax revenue or improving the methods of taxation. The results were disappointing. The majority of texts made no recommendations at all. Those recommendations that were made were varied and for the most part seemingly inadequate. The suggestions that seemed pertinent are given in Appendix I.

A few authors recommended, or at least mentioned as a possibility, the taxation of rental value of land, but no author proposed a method of taxation corresponding to the New Plan suggested in this essay.

Appendix A

CAUSES OF INCREASED LAND VALUE

The case of Belleaire Beach. A striking case of rapid increase in land value is that of Belleaire Beach, a long, narrow island near St. Petersburg, Fla. Only a few years ago—during World War II—the north half of the island was completely devoid of habitation; it was used as a training ground for gunners. The one and only road running into this uninhabited section (from the south) was narrow, and after the war so completely worn out as to be almost impassable. Immediately after the war land in this section could be bought for a few hundred dollars an acre. A little later a few scattered homes were built but the land was of little value because of its comparative inaccessibility.

Recently the artery of the island was widened and smoothly paved throughout its length. But more important still, a new causeway and bridge were built leading to the north half of the island from a town on the mainland, making the north section far more accessible. What happened to land values then? They skyrocketed! Water-front lots 80 feet wide are now selling at prices from $15,000 to $25,000 each!

If a lot that was worth only $200 a few years ago, is now worth $20,200, it means that $20,000 in value has been added to the value of the lot in some way. What gave the lot this added value? Could it be the improvements that have been put upon the land? The answer is No, because many of the lots that have been bringing these high prices were completely unimproved; they were covered with the original weeds and scrub trees, had no retaining walls or other improvements—

not even a path to the gulf. We may say that most, if not all, of the added value came to these lots without the expenditure of any money for improvements by the owners. What, then, did cause the added value?

Source of added value. There are two important sources of this added value. The first and most fundamental cause of the increase in value was the building of the wide, paved highway to replace the old, narrow, rough one, together with the building of the causeway and bridge. These improvements made the lots far more valuable because of the ease and convenience of access. We are warranted in saying this because of the simple fact that before the improvements were made people just would not pay high prices for the lots, in spite of the beauty of the beach, whereas, after the improvements were made they would.

The second important source of added value was the growth of population of this section of the island. Most people do not like to live among barren surroundings, even if accessible. But when houses began to be built the area seemed more civilized and congenial. Moreover, the homes were new and attractive and the grounds were beautified. People do not like to build a new house among a lot of old houses. They prefer to live in a community of new and attractive homes. The value of a vacant and wholly unimproved lot was therefore enhanced by the improvement of the adjacent lots without the owners of the vacant lots spending any money on them.

We may say, however, that in one sense the rapid building of homes in this section would not have taken place if it had not been for the highway improvements mentioned. For practical purposes, therefore, we may consider that most of the increase in land values as exemplified by the increase in sale prices of the vacant lots, was the result of the building of the highway, causeway, and bridge.

In this sense we may say that the making of the highway improvements, assisted by the increase in population of the community, *created land value.*

The Bronx River Parkway. A study was made of the upward trend of property values in Westchester County, New York, as the result of the building of the Bronx River Parkway. The results are published in *Parkways and Land Values,* by Nolan and Hubbard, being the *Harvard City Planning Studies* XI (1937).

For the purpose of the study a narrow strip of land on each side of the parkway was designated the Affected Area, as contrasted with the Unaffected Area comprising the remainder of those municipalities a portion of each of which lay in the Affected Area. A comparison was then made between the increase in land values in the Affected Area and the Unaffected Area.

The study showed that in the Unaffected Area factors other than the parkway caused an increase in land values of 393% from 1910 to 1932. Among these other factors mention was made of the increase in population and the changing value of the dollar. The study showed, however, that in the Affected Area the increase in land values during that same period was 1179%. The authors state that the increase in land values in the Affected Area was over $200,000,000 greater than it would have been if the land in this area had increased in value only 393% as it did in the Unaffected Area.

Other possible factors. In the study mentioned, no cause of the greater increase in land values in the Affected Area than in the Unaffected Area was given other than the building of the Parkway. It has been pointed out, however, that an intensive project of sewer construction was undertaken in the Bronx River Valley during the period studied, and that the Westchester County Sewer Commission gave this project credit for

the increase in land values along the Bronx River Parkway. It seems also that during this same period the New York Central Railway electrified the Harlem division, and it is believed by some that the consequent elimination of smoke and noise along the railroad may have contributed in part to the above-mentioned increase in land values.

We might consider, therefore, that the increase in land values was created in three of the ways mentioned in Chapter I, that is, principally by the building of the parkway (making the area more accessible from New York), but also by the sewer construction (public service), and possibly by the New York Central Railway (utility).

However, regardless of which of the two public improvements was the major factor, and regardless of whether the electrification of the railroad was a contributing factor, the important point is that public improvements often do cause land values to increase very greatly without the direct expenditure of any money by the landowners whose land values have increased.

Appendix B

RELATION BETWEEN RENTAL VALUE OF LAND, THE TAX, THE NET RETURN, AND THE CAPITAL VALUE

A fundamental principle of land value. The following fundamental principle of land values has been stated:

The capital value (market value) **of a plot of land tends to equal the amount of money that would have to be invested to yield a return** (in interest or otherwise) **equal to the net return of the land.**

The *rental value* of a plot of land is the income to be derived from it after all expenses are paid *except taxes.*

The *net return* from a plot of land is the income that is left from the rental value after the tax has been paid.

For example, if the tax on a plot of land is $200, and the income that can be derived from it, after all expenses have been paid except the tax, is $800 a year, that $800 a year is the rental value and the net return is $800 minus $200, or $600 a year. Assuming that money brings interest at 6%, it would take $10,000 invested (at 6%) to yield an income equal to the net return ($600) from the land. Therefore the capital value or market value of the land would tend to be $10,000.

Principle recognized by economists. The above principle of the relation between capital value and net return is understood and acknowledged by economists. For example, George H. Evans, Jr., in his Basic Economics (1950) explains (p. 48) how a plot of land having a rental value of $500 a year and not subject to tax (in which the net return would be $500 a year)

would have "in a 5% money market," as he calls it, a selling price of $10,000. [$500 is the interest at 5% on $10,000.] He then says, "After an annual tax of $50 is imposed, his net rent [meaning net return] becomes $450 and the sale value of his land is $9,000, that is, $450 capitalized at 5%."

To 'capitalize' an annual income, such as $450 a year, means to find the amount (sometimes called the capital amount) which at the current rate of interest (such as 5%)would yield the given annual income.

Rental value. The nature of rental value is illustrated by a comparison of the profit of doing business in the city and in the country.

Thus let us consider a flourishing service station in a city (or on the intersection of two busy highways, which in this case amounts to the same thing). Let us visualize the service station as being transported to a spot in the open country, some distance from a highway and accessible only by a seldom-traveled road. What would happen to the profits of the service station? We know they would diminish greatly for the obvious reason that few prospective customers would know of the station or be inclined to go out of their way to get to it. An attendant would have to be paid the same to spend eight hours waiting *for* customers in the country as waiting *upon* customers in the busy location. The service station might make $120 a month more profit in the city or busy location than in the country off the highway. Hence, we see that even if the owner got the country location rent-free he would still be better off in the busy location paying $100 a month rent.

A common expression in economics is: The presence of a community gives value to land. In the case of a business this can be translated to read: The presence of customers gives value to a location. And by this is meant rental value.

Relation between increases in rental value, tax, and capital

value. Under the present system of taxation, in which the tax is a fixed percent of the capital value of the land, any increase* in the rental value of a plot of land tends to cause the capital or market value to increase* in proportion, and also to cause the tax and the net return to increase* in proportion.
This may be illustrated by a concrete case.

A concrete case. Let us use the familiar illustration in which a plot of land has a rental value of $800, a 2% tax, amounting to $200, a net return of $600, and a capital value of $10,000, and see what happens to the tax, the net return, and the capital value if the rental value increases 25%, that is, to $1000. It is possible that because of faulty reassessment of capital value, the final correct adjustment of tax, net return, and actual capital value may come about gradually, after some fluctuation.

For example, if there is no immediate reassessment of capital value, the first effect will be that the tax at 2% remains $200 as before, so that when the rental value becomes $1000, the net return will become $1000 minus $200, or $800. If a prospective buyer asked the price of the land the owner might explain that $800 a year net return equals the interest at 6% on $13,333 and give that as the selling price. The prospective buyer, not realizing that the land must soon be reassessed and the tax increased, might buy the land for $13,333.

On the strength of this scale, the assessors, if they did not understand the true relationships might then reassess the land at $13,333. Let us see what would happen then.

If the land were reassessed at $13,333, the tax at 2% would become $266,67, reducing the net return to $733.33 (being $1000 minus $266.67). This net return capitalized at 6% indicates a capital value of only $12,222. ($733.33 is 6% of $12,222.) This shows that the assessed value, $13,333, was too high. The own-

* or decrease

er would be paying a tax on a capital value of $13,333 when he could not sell the land for more than $12,222. The assessment would have to be reduced.

Now let us assume that the assessors would know that an assessment of $13,333 would be too high and that they decided to increase the assessment from $10,000 to only $12,000. The tax at 2% would then be $240, and the net return $1000 minus $240, or $760. This return capitalized at 6% indicates a capital value of $12,667 ($760 is 6% of $12,667). This shows that the estimated capital value of $12,000 was too low, and another reassessment would have to be made—this time somewhat higher.

However, if the assessors understood the relationships involved and reassessed the capital value at $12,500 (also 25% higher), either at the beginning or after one or more incorrect reassessments, the tax at 2% would then be $250 and the net return $1000 minus $250, or $750. This net return, capitalized at 6% indicates a capital value of $12,500 ($750 is 6% of $12,500). This indicated capital value, which would become the actual market value, would then exactly equal the assessed capital value. Or to put it the other way, the assessed capital value would then exactly equal the actual market value, which it should.

We see, therefore, that under the present system of taxation, whenever the rental value of a plot of land increases 25% (as from $800 a year to $1000 a year), the proper reassessment is also 25% higher (as $12,500 instead of $10,000). In that case the tax at the same rate will also be 25% higher (as $250 instead of $200), and the net return will therefore also be 25% higher (as $750 instead of $600). This net return increased 25%, when capitalized, will therefore indicate a capital value 25% higher; hence, one that will agree exactly with the reassessed capital value.

If the capital value is reassessed higher than in proportion to the increase in rental value, the eventual result is that the actual market value becomes less than the assessed value and to correct the error a further reassessment has to be made. On the other hand, if the capital value is reassessed lower than in proportion to the increase in rental value, the eventual result is that the actual market value becomes greater than the assessed value, and to correct this error a further reassessment has to be made. The assessed capital value equals the actual market value only in case the capital value is reassessed as having an increase in proportion to the increase in rental value. In that case the tax and net return show the same proportionate increase.

Appendix C

MARKED DECREASE IN RENTAL VALUE

An example. As has been said, it is conceivable that the rental value of a plot of land might fall below what it was when the New Plan was put into effect. For example, let us say that when the New Plan was put into effect the rental value of a plot of land was $800 and the tax $200. Let us say that later the rental value sank to $600 and see what the effect would be on the tax. It might be well to consider first what would happen to the tax and capital value under the present system and then see what would happen under the New Plan.

Effect under the present plan. The net return in this case is the $800 rental value minus the $200 tax, or $600. A net return of $600 capitalized at 6% indicates a capital value of $10,000, and the $200 tax is therefore a tax of 2% of the capital value.

We have seen that under the present plan, when the tax is 2% of the capital value and the net return is capitalized at 6%, the rental value is presumably 8% of the capital value; or in other words, the capital value tends to be 100/8 of the rental value. This means that under the present plan if the rental value of the plot of land dropped to $600, the capital value would presumably drop to 100/8 of $600 or $7500. In that case the tax, at 2% of $7500, would become $150 instead of $200—a reduction of $50.

What would happen under the present plan, therefore, when the rental value of a plot of land fell from $800 to $600 is that the landowner would obtain a $50 reduction of tax but

would suffer a loss of capital value of his land to the extent of $2500. Now let us see what would happen under the New Plan.

Effect under the New Plan. Under the New Plan, when the rental value of the plot of land dropped $200 in the above case, the tax would be reduced by 50% of the $200, or by $100. The net return would then be the $600 rental value minus the $100 tax, or $500. This net return of $500 capitalized at 6% indicates a capital value of 100/6 of $500, or $8,333. The loss of capital value would therefore be from $10,000 to $8,333, or $1,667.

We see, therefore, that in the case of a decrease in rental value of a plot of land from $800 to $600, the landowner, under the New Plan, would have his tax reduced $100 instead of $50, and would suffer a loss in capital value of only $1,667 instead of $2,500.

The New Plan is therefore far more lenient to a landowner suffering a loss of rental value than the present plan.

Limiting reduction. Obviously there would have to be a limit to the amount of reduction of tax at 50% of decrease in rental value. For example, if in the above illustration the rental value decreased to $400, we see that a reduction in tax of 50% of the $400 decrease would be $200, which would mean that the previously existing tax of $200 would be reduced to zero. Furthermore, if the rental value dropped to $300, causing a decrease of $500, a reduction of tax equal to 50% of this decrease would be a reduction of $250. That would be more than the whole amount of the $200 tax, requiring, we might say, that the city pay the landowner $50 a year! That would hardly seem feasible.

It would seem, therefore, that in the case of any decrease in the rental value of land, the limit of reduction of tax should be such as merely to reduce the tax to zero, and that the tax

should then remain zero until such time as the rental value again exceeded the amount at which the tax became zero. (This would mean that in the above case the tax would become zero when the rental value dropped to $400, and remain zero, even though the rental value fell below $400, until such time as the rental value rose above $400.)

Appendix D

SLOWER INCREASE IN MARKET VALUE OF LAND UNDER THE NEW PLAN

A concrete case. To use a familiar illustration, let us assume that the rental value of a plot of land is $80 a year and that the tax is $20. The net return is therefore $60, and this is the interest at 6% on $1000, hence we will assume the market value to be $1000. (See line 1 of Table 3.)

When, under the present plan, the rental value doubles, the market value tends to double, the tax tends to double, and the net return tends to double. (This is explained in Appendix B.) This means that when the rental value becomes $160 a year, the market value tends to become $2000, the tax tends to become $40, and the net return tends to become $120 a year. (See line 2 of Table 3.)

TABLE 3

	Under present plan			Under New Plan		
Rental value	Tax	Net return	Capital value	Tax	Net return	Capital value
$ 80	$20	$ 60	$1000	$ 20	$ 60	$1000
160	40	120	2000	60	100	1667
240	60	180	3000	100	140	2333
320	80	240	4000	140	180	3000

But if the New Plan is put into operation when the market value of the lot is $1000, and a 50% tax is imposed upon any increase in rental value, and the rental value increases to $160 a year, this is an increase of $80 and the *new tax* is 50% of $80,

or $40. This added to the *base tax* of $20 gives a total tax of $60. The net return is then $160 minus $60, or $100. This is equal to the interest at 6% on only $1667; hence, under the New Plan, if the rental value doubles, the market value does not double—it increases by only two-thirds. (line 2, Table 3.)

(It should be understood that this is not a case of confiscation of investment because, in the case just mentioned, the market value never became $2000. It was $1000 and then rose to $1667. If the New Plan had not been in effect, the market value of the land would have gone to $2000 when the rental value doubled because the buyer would have anticipated a net return of $120 a year. But under the New Plan he would anticipate a net return of only $100 a year.)

Table 3 sums up the comparison given above for the case in which the rental value of a plot of land doubles. It then goes on to show the comparison between the present plan and the New Plan when the rental value has tripled, and when it has quadrupled.

We see from the table that in the case of a rise in rental value the capital or market value of land rises more slowly under the New Plan than under the present plan. (With a rise in rental value to $320, the capital value rose to $4000 under the present plan and only to $3000 under the New Plan.)

Appendix E

THE NEW PLAN VS. THE HENRY GEORGE PLAN

Disadvantage of Henry George's proposal. We have seen that Henry George's proposal to tax away the whole of the rental value of land, resulting in the reduction of the selling price of all land to zero, would constitute a form of confiscation. It is believed that this one fault in Henry George's proposal is probably the chief reason for its failure of adoption.

The principle that in taking in taxation all of the rental value of land would reduce the capital value or selling price of the land to zero appears to have been understood by Henry George, but instead of recognizing this as a disadvantage of his plan he attempted to justify it and to prove that it works no hardship on the landowner. This is shown in a passage in *Progress and Poverty* (p. 446) in which Henry George considers the case of a homestead owner and the effect upon him of the appropriation in taxation of all rental value of land. He says, "He (the homestead owner) will not be injured; on the contrary he will be the gainer. The selling price of his lot will diminish—*theoretically it will entirely disappear.* (Ital. ours) But it will serve his purpose as well as ever."

Henry George's proposal, called the "Single Tax," provided that all taxes other than the tax on the rental value of land be abolished. His argument that the homestead owner will not be injured lies in the assumption that, being relieved of all other taxes, this relief will offset whatever increase there is in the tax on his land so that he will pay no more tax after the adoption of the Single Tax than before. The argument is doubtless

quite valid in the case of the homeowner, but its shortcoming lies in the fact that it disregards others than homeowners.

The injustice of Henry George's proposal for a Single Tax equal to the full rental value of the land, in the case of those other than homeowners, is illustrated as follows.

Let us say that each of three persons has $12,000 invested at 6%.

Mr. A spends $2000 for a lot and $10,000 for the building of a house on the lot.

Mr. B spends $2000 for a lot and leases it to Mr. C for $150 a year.

Mr. C spends $10,000 for the building of a house on the lot he has leased from Mr. B.

We will assume that prior to the adoption of the Single Tax the tax on each lot is $30 and the tax on each house is $120.

First let us compare Mr. A's cost of owning his lot with the rent Mr. C pays for his lot. Mr. A gave up an income of $120 a year (interest on the $2000 he spent for his lot) and pays a tax of $30. This makes a total of $150 a year as the cost of owning his lot. This, we see, is the same as the rent Mr. C pays for his lot. (Mr. B is satisfied with the rent of $150 a year he charges Mr. C because after paying $30 in tax he still has a net return of $120 which equals the interest at 6% on the $2000 he invested in the lot.) We may say, therefore, that the rental value of each of the lots is $150 a year, as shown by the fact that that was the rent agreed upon in one case by Mr. B and Mr. C, and as shown in the other case by the fact that that was what it cost Mr. A to own his lot.

Now let us say that the Single Tax is inaugurated, that the $120 tax on each house is abolished, and that the tax on each lot is raised to $150, its full rental value. What happens to Mr. A, Mr. B, and Mr. C?

Mr. A applied the saving of $120 tax on his house to the in-

crease of $120 in the tax on his lot; hence his total tax on house and lot is the same as before ($150). In this sense we may agree with Henry George that Mr. A is "not injured." But what about Mr. B and Mr. C?

Mr. B finds that the tax on his lot is raised $120 (from $30 to $150); but he has no house on which to save $120 tax as Mr. A did. He therefore does not 'break even' as Mr. A did but suffers a loss of $120 a year in additional tax.

On the other hand, Mr. C does have a house and is therefore relieved of the $120 tax on it. But he has no lot and therefore does not have to apply this saving of $120 to any increase in the tax on a lot. He is therefore better off than Mr. A to the extent of $120 a year, and better off than Mr. B to the extent of $240 a year.

Effect of the Single Tax. Thus we see that the inauguration of the taxation of the full rental value of land and the elimination of all other taxes had the following effects:

(1) Mr. A, who owned a house and lot, was no worse off and no better off.

(2) Mr. B, who owned a lot but no house, was worse off, whereas

(3) Mr. C, who owned a house but no lot, was better off.

Thus we see that the argument that a homestead owner is "not injured" by the adoption of the Single Tax is misleading because it does not cover all cases. Whereas the homestead owner breaks even, the owners of land only suffer a loss, while the owners of buildings only are unduly benefited. Therein lies the injustice of the Single Tax Plan.

The injustice of the above illustration may be expressed differently. When, by the adoption of the Single Tax, the tax on the lots was increased to absorb the full rental value of the lots, the selling price of the lots was reduced to zero, thus amounting to a confiscation of $2000 in capital of both owners.

On the other hand when the tax of $120 on the houses was abolished, each house owner was saved $120 a year, which is the interest at 6% on $2000. This amounted to each house owner receiving a gift of $2000. From this point of view we may say that, whereas Mr. A 'broke even,' Mr. B lost $2000 and Mr. C gained $2000.

Effect of the New Plan. It should be understood that in the case mentioned above the adoption of the New Plan would make no difference to Mr. A or Mr. B or Mr. C in any immediate change in tax or rent or income. That is, so long as the rental value of the two lots remained the same, Mr. A would still pay the same $30 tax on his lot; Mr. B would still pay the same $30 tax on his lot and obtain the same $150 rent from Mr. C. Mr. A and Mr. C would still pay the same tax on their houses.

If the rental value of the lots went up to $160, Mr. A would have to pay $5 a year more in taxes for a $10-a-year gain in desirability of his lot. Mr. B would also pay $5 a year more tax on the lot he rented to Mr. C, but he would be able to get $160 in rent instead of $150; hence, his net return would be higher ($125 instead of the former $120). Mr. C would pay $160 a year in rent for a lot whose rental value was $160.

Advantage of the New Plan over the Henry George proposal. The New Plan eliminates the faults of Henry George's proposal. It avoids the fault of unfairness illustrated above by providing that under no circumstances will the tax on any land be increased in any way to cause the landowner to lose any of his investment in the land. Moreover, the New Plan is less drastic than Henry George's proposal because it does not propose to tax away from the landowner even the whole of the *increase* in rental value, but only 50%.

The adoption of the New Plan cannot work a hardship on anyone.

Appendix F

EFFECT OF CONTINUED REASSESSMENT AT THE SAME VALUE

Spurious increase in capital value. When the rental value of a plot of land increases but there is no reassessment of capital, there is a spurious increase in capital value.

A concrete case. Using the familiar illustration, let us assume that a tract of land has a market value one year of $10,000 —the tax at 2% being $200, the net return at 6% being $600, and the rental value therefore $800. (See line 1 of Table 4.)

Let us say that in a few years the rental value doubles—becomes $1600. Appendix B explains that in this case, if the land is assessed each year at its market value, the market value will also double (become $20,000) and the tax will double (become $400).

But let us say that the land is not reassessed but is held on the tax rolls at the same market value of $10,000. The tax will remain at $200. Now when the rental value has become $1600, the net return will be $1600 less $200, or $1400. This return, capitalized at 6%, gives a market value of $23,333, instead of the normal $20,000. (See line 2 of Table 4.)

If the rental value becomes three times as great ($2400), the normal market value would be three times $10,000, or $30,000, if the land were reassessed each year. But if the land is still on the tax rolls at $10,000, and the tax remains at $200, the net return will be $2400 less $200, or $2200. This net return, capitalized at 6%, gives a market value of $36,667 instead of the normal $30,000. (See line 3.)

The market value was 16 2/3% too high in the first instance and 22.2% too high in the second instance. The longer the reassessment is postponed the greater is the deviation of the market value from normal. When the rental value has increased from $800 to $4000, as shown in line 5 the capital value is too high by 26⅔%.

TABLE 4

	Present system with yearly reassessment			Present system with no reassessment			
Rental value	Tax	Net return	Capital value	Tax	Net return	Capital value	Too high
$800	$200	$600	$10,000	$200	$600	$10,000	
1600	400	1200	20,000	200	1400	23,333	16⅔%
2400	600	1800	30,000	200	2200	36,667	22.2%
3200	800	2400	40,000	200	3000	50,000	25%
4000	1000	3000	50,000	200	3800	63,333	26⅔%

Effect of postponed reassessment. Now let us assume that the above property has been assessed at $10,000 for a considerable time during which the rental value increased from $800 to $3200, and that the market value has risen to $50,000, as shown in line 4. Let us say the land is then reassessed at $50,000. The reassessment of the land does not in any way affect its rental value, which, let us say, remains at $3200. We have assumed the tax rate to be 2%, and let us assume that it remained 2% after the reassessment. The tax on the land now becomes 2% of $50,000, or $1000. The net return of the land is therefore now $3200 minus $1000, or $2200 per year. This net income capitalized at 6% gives only $36,667 as the capital value of the land. That amount is all the owner could get for the land now that its net return is only $2200. The reassessment of the land after the lapse of time has cost the owner a reduction of capital value (selling value) from $50,000 to

$36,667. This is a confiscation of capital value to the extent of $13,333.

This shows the injustice of keeping the assessment of land the same on the tax roll for several years in succession when there is an actual rise in the rental value of the land.

Appendix G

WHERE THE MONEY COMES FROM TO PAY THE NEW TAX

The case of an apartment house. Let us say that an apartment house in the suburbs of a city contains twelve apartments, renting for $60 a month each. This is a total rent of $8640 a year. Now let us say that the city widens and repaves the street on which the apartment house is located, making it a more desirable place in which to live. As a consequence the landlord is able, without any expense on his part, to raise the rent of each apartment to $62.50 a month and still keep all the apartments rented. His rental income is now $9,000 a year—an increase of $360 a year over the former rent. We may consider, therefore, that the yearly rental value of the land has increased by $360. (This is true because if the apartment house is owned by Mr. A and the land is owned by Mr. B from whom Mr. A rents the land, Mr. B can charge Mr. A $360 a year more for the land. It is always the owner of the land who reaps the benefit of an increase in desirability of a location—not the tenant. This fact is agreed upon by all economists. Of course, the tenant enjoys the increased desirability of a location, but he pays extra for it.)

If the rental value of the land is reassessed $360 a year higher than formerly, and the increase is taxed at 50%, the landowner will pay, in additional taxes, one-half of the $360 increase in rental value, or $180. The other $180 a year additional income the landowner may keep for himself. The tax is therefore no hardship on the landowner.

We see, therefore, that the money the landowner pays in additional taxes comes from the increased rent paid by the apartment dwellers, to whom it was worth $2.50 a month more to live on the wide, smooth street.

The case of a store. Now let us take the case of a store owner. Let us say the store is in the suburbs of a city and the street on which the store is located is widened and repaved. This causes more homes to be built on the street and enables persons living in town to drive out to the store where it is easier to park and do their shopping. The store therefore does increased business, and let us say that as a result, the store's profits are increased $500 a year over and above all additional expenses entailed because of the increase in business. The $500 a year increase in net profits represents an increase brought about by the improvement of the street and without any expense on the part of the store owner or landowner.

We may asume, therefore, that the land on which the store is located has increased in rental value by $500. If the store owner owns the land also, he reaps the benefit. If not, the landowner reaps the benefit because he can charge $500 a year more rent for the land— still leaving the store owner as well off as before. In either case the landowner gets the benefit. If the $500 a year increase in rental value is taxed at 50% the landowner pays a yearly new tax of $250, retaining the other $250 for himself. We see, therefore, that in this case the money to pay the New Tax comes from the increase in net profits to the store, made possible by the improvement of the street.

The case of residence property. Let us say that the property owners along a certain street in a residential section have become dissatisfied with the condition of the street and have petitioned the city council to have the street widened and repaved. Let us say that as a result of the widening and repaving, the street is a more desirable one on which to live—so that, as

evidenced by increased rents that landlords are able to charge tenants, the rental value per standard lot has increased $50. If this increase is taxed at 50%, the owner of each standard lot will be taxed an additional $25 per year. In the case of rented houses, the landlord, who is presumed to be getting $50 a year more rent, can pay the $25 additional tax out of this $50 additional rent, keeping the remaining $25 for himself. In the case of residents who own their homes, the additional tax of $25 a year would be paid in lieu of a rent increase of $50 a year, because of the increased desirability of living on the street.

Appendix H

SPECULATION IN LAND VALUES DISCOURAGED BY THE NEW PLAN

Possible return under present system. Let us say that a speculator contemplates investing $6000 in a lot, anticipating that it would double in market value in six years. Let us see what rate of return the speculator would make on his investment if the land increased in market value $1000 each year for six years—thus becoming $12,000 at the end of the sixth year—and assuming that the land is reassessed each year at its market value. The following computations show that in that case the total taxes paid would be $1020.

	Market value	Tax at 2% of market value (present plan)
Beginning of first year	$ 6000	$ 120
second year	7000	140
third year	8000	160
fourth year	9000	180
fifth year	10000	200
sixth year	11000	220
	Total tax	$1020

Deducting the total taxes from the gross profit of $6000 leaves a balance of $4980. Assuming that a capital gains tax amounting to 25% was paid out of the $4980, there would be a net profit of $3735. This net profit represents the compound interest on $6000 for six years at 8½%. The speculator might consider this rate of return satisfactory and decide to buy the land.

Possible return under the New Plan. However, if before the speculator had invested in the land, the New Plan were put into effect, the speculator would know that if the market value doubled in six years it would be because the rental value doubled—increasing from $480 to $960—and that if the increase was uniform the rental value at the beginning of each year would be as shown in the first column below, and that the total taxes he would have to pay would be $1320 instead of $1020.

	Rental value (8% of market value)	Excess rental value	New Tax (at 50% of excess r.v.)	Total Tax (New Plan)
Beginning of first year	$480	$ 00	$ 0	$ 120
second year	560	80	40	160
third year	640	160	80	200
fourth year	720	240	120	240
fifth year	800	320	160	280
sixth year	880	400	200	320
			Tax for six years:	$1320

(Potential rental value. It is important in this connection to remember that even though a lot is vacant and the owner is consequently receiving no income from it in rent or otherwise, it is considered as having a rental value (at least a potential rental value) corresponding to the actual rental value of the adjacent lots, if put to their best use. The assessor is therefore obliged to assess the rental value in a manner comparable to the adjoining lots, even though it is vacant.)

The speculator would be able to determine that the rental value of $960, which the land would have at the end of the sixth year would be $480 in excess of the original rental value of $480, and that this excess rental value, taxed at 50% would cause an additional tax of $240, which, added to the base tax of $120, would give a total tax of $360.

When this tax of $360 was deducted from the rental value of $960, the net return would be only $600. Any prospective purchaser, capitalizing this possible net return at 6%, would find that the market value of the land was only $10,000, instead of the expected $12,000. The sepeculator would know therefore that he could not get more than $10,000 for the land at the end of six years, even if the rental value doubled.

If the land were sold for $10,000 at the end of the sixth year, the gross profit would be only $4,000. After paying the total taxes of $1,320, there would be a balance of only $2,680. If a capital gains tax had to be paid, amounting to 25%, the net profit on the investment would be only $2,010. This net profit represents the compound interest for six years on the investment of $6000 at only 5%. This is not a satisfactory return on a speculative investment.

It is probable that if the New Plan is adopted the capital gains tax on land might be eliminated. Even if there were no capital gains tax under the New Plan, the profit of $2680 would be the compound interest on the investment of $6000 at less than 6½%—still too low a return for a speculative investment.

Appendix I

WHAT THE ECONOMISTS SAY

Suggestions of economists for obtaining more tax revenue. Fairchild and Compton, in their *Economic Principles* (1930) (p. 541) recommend a "general turnover tax" of not over 1% (a form of sales tax). They think it "will furnish to the government all the money which it will require."

Gemmill and Blodgett, in their *Current Economic Problems* (1932-1939), mention (p. 251) two "Defects of the General Property Tax." (1) They object to the taxation of corporations as constituting a "double taxation." (2) They say the general property tax is grossly inequitable—that assessors "are for the most part untrained and inexperienced and do their work in a relatively short time."

These authors make four recommendations under the heading, "Improvement of the General Property Tax." They say that (1) assessors should be appointed instead of elected; (2) the interest penalty for delay in paying taxes "should be two or three times the current rate"; (3) "No further exemptions from the tax should be granted for the purpose of attracting business enterprises to a community"; and (4) Assessments should be made oftener.

No mention was made of the taxation of rental value.

John Ise, in his *Economics* (1946-1950) says, (p. 653) "As payment for the privilege of using the highways the gasoline tax functions well and equitably; but as payment for the wear and tear incident to its use, it is not satisfactory. Heavy trucks

and buses damage paved highways far more than in proportion to their gasoline consumption and they may well pay heavy license taxes to help cover such wear."

Knight and Hines, in their *Economics.* (1952) say (p. 716), that improvements in the administration of the general property tax can be achieved through centralization of assessment and administration, and that the general level of competence of assessors can be raised and the 'neighborhood bias' can be reduced by assigning the assessor to an unfamiliar district.

Suggestions of economists for taxing rental value. A few of the authors of textbooks in economics made suggestions for the taxation of rental value.

Knight and Hines (op. cit.) say (p. 516), "The prevention of unearned increment might be combined with the gradual socialization of rent—the state might proceed somewhat in the fashion suggested by the following case.

"J. Jones, I, has a lot that he bought at a price including some unearned increment to the seller. During his lifetime, Jones is left unmolested in what he paid for, but the state takes by taxation any other unearned increment arising in that time. On his death the tax on the rent is increased. The increased taxation decreases the capitalized value of the land to J. Jones, II, the heir, who is given corresponding credit on his inheritance tax." The authors explain that after successive transfers the capital value is gradually reduced to zero, and that then "the problem of unearned increment is solved by the fact that the state takes all the rent."

The above suggestion seems to be similar to the New Plan proposed herein in one respect, that is, it appears to recommend the taxation of increases in rental value. But it differs from the New Plan in that it proposes to tax away 100% of the increase in rental value instead of 50% . The plan appears

also to recommend the imposition of different rates of taxation upon different landowners as a device for imposing a heavy inheritance tax.

Tribute to Henry George. Broadus Mitchell, in his book, *The World's Wealth—Its Use and Abuse,* pays a high compliment to Henry George, the Economist who first proposed the taxation of rental value, saying that "If America were invited to contribute one name to an international economic hall of fame, the rest of the world would scarcely understand it if we did not nominate Henry George."

Without seeming to express his own conviction, Mitchell says (p. 401), that "some have proposed compensating owners up to the point of the purchase price by them, and taking the remainder, the obviously 'unearned increment' in tax. Henry George himself wanted to take the whole of the economic rent, or virtually the whole of it, without compensation to owners."

The expression "compensating owners up to the point of the purchase price" makes the proposal read like a recommendation that the community buy the land from the present owners, paying each not the present market value but the amount that the present owner paid for the land, in order that the community (presumably by leasing the land) could then obtain all the rental value, including all increases. This plan (if it were possible, which seems doubtful) would at least have the merit of not causing the confiscation of any actual cash investment in land; but there is no need whatever for a community to buy the land in order to obtain the rental value from it—any portion or all of it. This can be done by taxation alone. And this proposal amounts again to the taxation of 100% of the increases in rental value of land instead of 50%, as in the New Plan.

Rental value—nature created. Theodore Morgan, in his *Introduction to Economics* (1950), says (p. 371), "there is a

long and respectable tradition in economics that land rent is an unjustifiable return and ought to be eliminated. ... The question is whether landowners ought to have the right to levy a toll on the public for a 'productivity' advantage that Nature created and for location advantage created by the growth of population. ... The landlord draws a return for doing nothing save leasing out what Nature gave and population made available."

Strictly speaking, of course, there is no such thing possible as the elimination of rental value ("land rent"). Desirable land will always have a rental value. By eliminating land rent, the author presumably means merely preventing the landowner from retaining it—by taxation.

Oddly enough, however, the author contends (p. 372)that "land rent is only one of several sources of unearned increment, and not one of the most important." He says, "It seems more sensible to direct taxation and other relevant measures against all kinds of payment for which no justifying return is made to society." He does not mention any of these other sources of unearned increment.

Morgan explains that in any program for the taxation of rental value of land, any tax on improvements must be excluded from the tax on rental value, but he fears that this can not be done effectively. It has been shown in this essay, however, that this can be done in a practical way. Indeed, some communities assess land and improvements separately. It can be done also in the case of rental value.

Economists favoring the taxation of rental value. F. C. R. Douglas, in his *Land Value Rating* (1936), mentions the fact (p. 22) that a tax on rental value cannot be shifted to the tenant but must be paid by the landowner himself. He points out that any attempt to increase tax revenue by increasing the rate of tax on market value diminishes the market value. He

says that "A better plan, therefore, is to base the rate upon the economic rent or annual value."

Patterson and Scholz, in their *Economic Problems of Modern Life,* appear to recommend the gradual approach to the taxation of the full rental value of land (as recommended by Henry George) in three stages (p. 352).

They suggest that in the first stage, "a definite rate of taxation may be imposed on the present economic rent but not great enough to absorb the entire net income from the land." This would be the case if a 2% tax on market value were changed into a 25% tax on the rental value—which would amount to the same thing, being only a shift in name. (If the rental value of a piece of land is $80 and the market value therefore $1000, a $20 tax is a tax of 2% of market value or a 25% tax on the rental value.)

As a second stage, they suggest that "the future increment in land values" . . . "be taxed away." This would mean a 100% tax on increases in rental value.

Then they say, "Finally, the full economic rent may be taxed away," which would mean a 100% tax on *all* rental value.

These suggestions, of course, are drastic in comparison to the New Plan, which is a burden to no one because:

(1) The New Plan avoids any confiscation of investment in land by providing that there will be no increase in the tax on the rental value that exists when the Plan is adopted;

(2) it does not take away from the landowner at the time of the adoption of the plan any of the increase in rental value that has occurred since he bought the land;

(3) it provides that there will be no increase in tax at all unless there is an increase in the rental value of the land after the Plan is adopted; and because

(4) it taxes only 50% of the increase in rental value (which

may be paid out of that increase) leaving half of this increase in the hands of the landowner.